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TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

No. 151.

THE GOULDS' MANUFACTURING COMPANY, APPELLANT,

vs.

JOHN P. COWING, GEORGE COWING, AND PHILO COWING.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF NEW YORK.

FILED JANUARY 2, 1879.

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1 United States circuit court, northern district of New York.

THE GOULDS' MANUFACTURING COMPANY
vs.
JOHN P. COWING, GEORGE COWING, AND Philo Cowing. } In equity.

The complainant in the above entitled cause filed its bill of complaint, which is hereunto annexed, on the 15th day of January, 1873, and the writ of subpœna was thereupon issued and returned personally served.

An appearance was duly entered for the defendants by E. G. Lapham as their solicitor, and on the 7th day of April, 1873, an answer to said bill of complaint was filed, the same being hereto annexed.

On the 8th day of April, 1873, the complainant filed a replication, the same being hereto annexed.

Testimony was thereafter taken by the respective parties and at
2 the January adjourned term of said circuit court held at the city of Albany, on the third Tuesday of January, 1874, before the honorable Lewis B. Woodruff, judge, the said cause was argued by counsel for the respective parties and decision reserved.

On the 17th day of March, 1874, an order for a decree for complainant, awarding an injunction and account, was filed and entered, which is hereto annexed.

On the 19th day of March, 1874, an order denying motion for rehearing was filed and entered, the same being hereto annexed.

On the 21st day of March, 1874, a decretal order of said court was filed and entered in favor of the complainant by which it was adjudged that a perpetual injunction should issue against the defendants, and that an accounting be had before John Norton Pomeroy, esq., acting as a master of this court, the said order being hereunto annexed.

On the 28th day of April, 1874, the said master filed his report, which is hereto annexed.

3 On the 4th day of May, 1874, the defendants filed their exceptions to said master's report, the same being hereto annexed.

Afterwards and at a term of said court held at Utica on the 2d day of July, 1874, before the honorable Ward Hunt, justice, the said cause came on for a hearing upon said exceptions to said master's report and was argued by counsel for the respective parties and decision reserved.

On the 2d day of September, 1874, an order was filed and entered vacating and setting aside the said master's report and the order of reference to John Norton Pomeroy as master, and it was ordered that the case be referred to Charles Mason, esq., a master of this court, to take an accounting therein, which order is hereto annexed.

On the 7th day of February, 1876, Charles Mason, master, filed his report, which is hereto annexed.

On the 1st day of May, 1876, the defendants filed their exceptions
4 and amended exceptions to said master's report, the same being hereto annexed.

Afterwards said cause came on for a hearing upon said exceptions to said master's report, before the honorable Alexander S. Johnson, circuit judge, and was argued by counsel for the respective parties and decision reserved.

On the 14th day of September, 1877, an order was filed and entered herein allowing said exceptions to said master's report and directing a decree for complainant for nominal damages only, which said order is hereto annexed.

On the 8th day of November, 1877, a final decree was filed and entered herein, which is hereunto annexed.

5 United States circuit court, northern district of New York.

THE GOULDS' MANUFACTURING COMPANY
vs.
JOHN P. COWING, GEORGE COWING, AND PHILO COWING.

To the judges of the circuit court of the United States for the northern district of New York:

The Goulds' Manufacturing Company, a corporation organized under and by virtue of the laws of the State of New York, and having its principal place of business in the village of Seneca Falls, in the State of
6 New York and district aforesaid, and a citizen of said State of New York, brings this its bill of complaint against John P. Cowing, George Cowing, and Philo Cowing, each of whom is a resident of said village of Seneca Falls, in said district, and a citizen of said State of New York.

And thereupon your orator complains and says that heretofore and before the 7th day of August, 1871, one William H. Pollard had invented a new and useful improvement in gas pumps, which had not been known or used by others before his discovery or invention thereof, and was not at the time of his application for a patent therefor, as hereinafter stated, in public use or on sale with his consent or allowance; that thereupon, and before the 8th day of August, 1871, the said Pollard made application in writing by a petition, presented to the Commissioner of Patents, describing said improvement and praying that letters patent might be issued therefor, and accompanied the same with his oath that he was a citizen of the United States, and did verily believe that he was the original and first inventor or discoverer of said improved gas pump, and that the same had not, to the best of his knowledge or belief, been previously known or used, and did also deliver such a written description of his said invention or discovery, and of the manner and process of making and constructing the same, accompanied by drawings and a model of said invention, as was by law required, and did in all respects conform to and comply with the acts of Congress in such case made and provided.

And your orator further shows that subsequent to such invention, and prior to the issuing of the letters patent hereinafter stated, the said William H. Pollard assigned and transferred unto your orator the

full and exclusive right which he had in and to such invention or improvement, and authorized and requested the Commissioner of Patents to issue letters patent therefor unto your orator as the assignee of the whole right and title of the said Pollard.

7 And your orator further shows that thereupon the United States of America issued its letters patent, under the seal of the Patent Office, dated August 8th, 1871, signed by the acting Secretary of the Interior, and countersigned by the Commissioner of Patents, whereby the United States of America did grant, according to law, unto your orator, its successor or assigns, for the term of seventeen years from the date thereof the exclusive right to make, use, and vend the said invention, a description whereof was annexed to and made a part of said letters patent, to which said letters patent, or a duly certified copy thereof now here ready to be produced, your orator craves leave to refer.

And your orator further shows, that immediately after the issuing of said letters patent it put the invention described in and secured by the same into public use by manufacturing and putting on sale the same, and that it is still in the exclusive possession of the rights secured thereby.

And your orator further shows that the rights so secured by said letters patent were and are of large value, and that your orator would make and would have made large profits from the manufacture and sale of said improved gas pump if not interfered with and prevented by the unlawful acts of the defendants, done and threatened to be done, as hereinafter stated.

And your orator further shows that since the 16th day of August, 1871, the said defendants, John P. Cowing, George Cowing, and Philo Cowing, in violation of the rights so secured to your orators by said letters patent, have at Seneca Falls, in said district, and elsewhere continuously made, used, and vended to others to be used improved gas pumps, constructed in the manner described in the specifications attached to such letters patent, and that they ever since the said 16th day of August, 1871, have been and now are engaged in making, offering for sale, and selling a large number of such improved gas pumps constructed as aforesaid, and the said defendants do unlawfully refuse to desist from making, using, and selling the same, in violation and infringement of your orator's rights, secured to it as aforesaid, without its consent or allowance.

8 All which actings and doings are contrary to equity and good conscience.

In consideration whereof, and forasmuch as your orator can only have adequate relief in this honorable court, where matters of this kind are alone cognizable, to the end, therefore, that the said defendants may respectively full, true, and perfect answers make, upon their respective corporal oaths, according to the best of their respective knowledge, information, and belief, to all and singular the matters and charges aforesaid, and that as fully and particularly as if the same were again repeated, and that the said defendants, and each of them, may be enjoined and restrained from further making, using, or vending to others to be used, the said improved gas pumps, the exclusive right to make and vend which is secured to your orator by said letters patent, and that the defendants may be decreed to account with and pay over to your orator the profits of which said defendants have deprived your orator by the infringement of said patent, and by such unlawful use, manufacture, and sale, and that your orator may recover and the defendants

be decreed to pay its damages by reason of the premises, and that the defendants may be enjoined from using or vending the said improved gas pumps so by them unlawfully made and used, and that such improved gas pumps which now are or may hereafter be in their possession may be broken up and destroyed, and that your orator may have such other or further relief as the nature of its case shall require, and as shall be agreeable to equity—

May it please your honors, the premises being considered, to grant unto your orator a writ of injunction issuing out of this honorable court, or issued by one of your honors, according to the form of the statute in such case made and provided, enjoining and restraining the said defendants, their attorneys, agents, and servants, from making, using, and vending any such improved gas pumps as are described in said
9 letters patent, and as the said defendants have unlawfully manufactured, used, and sold, and now are so unlawfully manufacturing, using, and selling.

And also may it please your honors to grant unto your orator a writ of subpœna directed to the said John P. Cowing, George Cowing, and Philo Cowing, commanding them and each of them on a day certain, therein to be named to be and appear in this honorable court, then and there to answer the premises and to stand to, perform, and abide such further order, direction, and decree as may be made against them.

And your orator, as in duty bound, will ever pray, &c.

S. S. GOULD,
Pres't of the Gould Manufacturing Co.

J. B. PERKINS,
Complainant's Sol'r.
W. F. COGSWELL,
Of Counsel.

NORTHERN DISTRICT OF NEW YORK,
Seneca County, ss:

Seabury S. Gould, being duly sworn, says that the Goulds' Manufacturing Company, the complainant in the above action, is a corporation organized under and by virtue of the laws of the State of New York, and he is the president thereof; that the foregoing bill of complaint is true of his own knowledge, except as to the matters therein stated on information and belief, and as to those matters he believes it to be true.

SEABURY S. GOULD,
Pres't of the Gould Manufacturing Co.

Sworn to before me, January 11th, 1873.
[L. S.]
WM. K. MILLER,
Notary Public in and for Seneca Co.

(Endorsed:) Filed January 15, 1873.

10 United States circuit court, northern district of New York. In equity.

JOHN P. COWING, GEORGE COWING, AND PHILO COWING, *ads.* THE GOULD MANUFACTURING COMPANY.

The several answer of John P. Cowing, George Cowing, and Philo Cowing to the bill of complaint of The Goulds' Manufacturing Company, complainant.

This defendant, now and at all times hereafter saving and reserving to himself all and all manner of benefit and advantage of exception to the many errors and insufficiences in the complainant's said bill of complaint contained, for answer thereunto, or unto so much or such parts thereof as this defendant is advised is material for him to make answer unto, answers and says:

That on or about the 17th day of August, 1871, the complainant commenced an action at law in this court by the service of a copy declaration and rule to plead, in which the plaintiff claims to recover damages for an infringement of the same letters patent claimed in the complaint in this action, in which action this defendant plead the general issue, and the said issue so joined in said action has not been tried but the said action is yet pending and undetermined in this court.

This defendant for a further answer to the said bill of complaint says that, as he is informed and believes, the said William H. Pollard,
11 named in said bill of complaint, was not the original and first inventor of the said improvement in gas pumps therein set forth, or of any material part or portion thereof, but the same was, prior to said alleged invention of said Pollard, known to the defendant at Seneca Falls, N. Y.; to the Ames' Manufacturing Company, at Chicopee, Mass.; to the Bay State Iron Works, at Erie, Pennsylvania, and to one Osborn, the superintendent of said works; to Winslow & Brothers, at Petroleum Centre, Pennsylvania; to Burdy and Logan, of Tidioute, Pennsylvania; to the defendant George Cowing, at Seneca Falls, aforesaid, and by him described in an application for a patent, filed in the Patent Office on the 7th of April, 1856; to J. Ramsbottom and Company, at Leeds, in England, and described in a publication entitled Engineering, published in London in the years 1867 to 1870 inclusive, and in the advertising sheets of said paper; to one Hadley, who obtained a patent therefor in March, 1866, as illustrated and described in the application and schedules filed by said Hadley in the Patent Office, and was known to said Hadley at the office and works of the said Ames' Manufacturing Company aforesaid; to T. C. Smith, who resides at Chicago, in the State of Illinois, who filed a drawing and specification thereof in the Patent Office on the 25th of April, 1865, and applied for a patent therefor, which application was rejected for want of novelty; to William Crofton Moat, whose present residence is unknown, but who obtained letters patent from the Patent Office on or about the 25th December, 1849; to M. R. Clapp, who resides at Hudson, in the State of New York; to A. S. Cameron, who resides in the city of New York, in said State; to Samuel H. Gilmon, who resides at Cincinnati, in the State of Ohio, who, on or about the 17th December, 1850, obtained from the Patent Office a patent therefor, and in his specification for said letters patent described the same invention as that set forth in the complaint as be-
12 ing the invention of Pollard, the said application and specification being numbered No. 7838 on the files of the Patent Office; and that the same was known to the various firms and persons aforesaid, at the respective places aforesaid, and was so known and in public use and on sale for more than two years prior to the application of the said plaintiff.

And the defendant, further answering said complaint, says that, as he is informed and believes, the said Pollard was not the original or first inventor of the improvement stated in said bill of complaint, or of a material part or portion thereof, but the same is described in a work entitled "The Engineer's and Mechanic's Drawing Book," published in Edinburgh, Scotland, in the year 1858, in plates thirty-nine

and forty-one, figure nineteen, and in plate sixty-three, which book and descriptions were known to said Pollard for more than two years before the said application, and was also described in a work entitled "The United States Patent Law—Instructions How to Obtain Letters Patent, &c., published at the office of the Scientific American in New York City, by Munn & Co., who obtained a copyright therefor in the year 1865, and made said publication in 1866, and will be found at page thirty-seven of said publication.

This defendant, further answering said complaint, says that the said application of the said plaintiff for letters patent upon the alleged invention of said Pollard was rejected for want of novelty by the Commissioner of Patents on or about the 7th March, 1870, and again on or about the 11th January, 1871, and the aforesaid application of said T. C. Smith and the aforesaid letters patent issued to said Moat were the basis and reference upon which such rejection was made; that subsequently, as this defendant is informed and believes, the claim and specification of the plaintiff upon the alleged invention of the said Pollard were fraudulently altered for the purpose of obviating said objections upon which the said rejections were based, so that the same as thus altered
13 contains no material part of what was claimed as the invention of said Pollard in the first specification and claim of the plaintiff, but embraces a claim and combination substantially different, and not as aforesaid the invention of said Pollard, and the said alleged letters patent to the plaintiff are null and void.

The defendant, further answering the complaint, says that after the rejection of the plaintiff's application, on or about the 7th day of March, 1870, as he is informed and believes, was engaged in the manufacture, and kept for sale to the public, pumps of the description named in said complaint, and that the same were kept for sale and in use since that period to the knowledge of the plaintiff; that before this defendant knew of the said letters to the plaintiff, as alleged in the complaint, and before the commencement of said action at law, which was the first knowledge or information defendant had upon the subject, this defendant and his partners, the other defendants, had engaged in the manufacture of a limited number of gas-pumps, and had the same partially completed; that they have since finished and made sale of the same, but have not so made and sold a large number as set forth in the complaint, and whether the pumps so made are constructed in the manner described in the specifications attached to the plaintiff's letters patent in all respects he is unable to state; yet that they are similar in their construction he is informed and believes, and he leaves the complainant to its proof as to such identity.

And this defendant, further answering, says that whether the rights secured by said letters patent were and are of large value, as alleged in the complaint, or whether the complainant would have made large profits from the manufacture and sale of the same, if not interfered with, as therein alleged, this defendant has no knowledge or information sufficient to form a belief, except he believes the same to be of inconsiderable value to the plaintiff or any one else.

And this defendant, further answering said complaint, says that as to whether the said Pollard made an assignment of his alleged invention
14 to the complainant, the defendant has no knowledge or information, save by said bill of complaint, and he leaves the complainant to make such proof thereof as it shall be advised; without that, any other matter material for the defendants to answer unto, and

not herein or hereby well and sufficiently answered, confessed, avoided, traversed, or denied, is true, to the best belief of the defendant.

All which matters and things the said defendants are each ready to verify, maintain, aver, and prove, as this honorable court shall direct, and hereby prays to be hence dismissed with his reasonable costs and charges in that behalf sustained.

E. G. LAPHAM,
Solicitor and of Counsel for Defendants.

NORTHERN DISTRICT OF NEW YORK,
Seneca County, ss:

John P. Cowing, George Cowing, and Philo Cowing, being each duly sworn, says he is one of the defendants in the foregoing answer named; that he has read the same and knows the contents thereof, and that the same is true of his own knowledge except as to those matters therein stated on information and belief, and as to those matters he believes it to be true.

JOHN P. COWING.
PHILO COWING.
GEORGE COWING.

Sworn and subscribed before me this 22d day of March, 1873.

CALVIN WILLERS,
Notary Public in and for Seneca County, N. Y.

(Endorsed:) Filed April 7, 1873.

15 Circuit court of the United States, southern district of New York.
In equity.

THE GOULDS' M'F'G CO.
vs.
JOHN P. COWING ET AL.

The replication of The Goulds' M'f'g Co., complainant, to the answer of John P. Cowing, George Cowing, and Philo Cowing, defendants:

This repliant, saving and reserving unto itself all and all manner of advantage of exception to the manifold insufficiencies of the said answer, for replication thereunto says that it will aver and prove its said bill to be true, certain, and sufficient in the law to be answered unto; and that the said answer of the defendants is uncertain, untrue, and insufficient to be replied unto by this repliant; without this, that any other matter or thing whatsoever in the said answer contained material or effectual in the law to be replied unto, confessed and avoided, traversed or denied, is true.

All which matters and things this repliant is and will be ready to aver and prove as this honorable court shall direct, and humbly pray
16 as in and by its said bill it has already prayed.

COGSWELL & PERKINS,
Compl't's Sol'rs.

(Endorsed:) U. S. circuit court. The Goulds' M'f'g Co. vs. John P. Cowing et al. Replication. Cogswell & Perkins, compl't's sol'rs, Rochester, N. Y. Filed April 8, 1873.

17 At an adjourned term of the circuit court of the United States of America for the northern district of New York, in the second

circuit, held at the city of Utica, on Tuesday, the 17th day of March, in the year of our Lord one thousand eight hundred and seventy-four.

Present, the honorable Lewis B. Woodruff, judge.

THE GOULDS' MANUFACTURING COMPANY
vs.
JOHN P. COWING ET AL.

This cause having heretofore come on for a hearing upon pleadings and proofs, and having been argued by counsel for the respective parties, and the court having considered the same, ordered decree for complainant awarding an injunction and an account, as prayed in the bill of complaint.

18, 19 At an adjourned term of the circuit court of the United States of America for the northern district of New York, in the second circuit, held at the city of Utica, on the nineteenth day of March, in the year of our Lord one thousand eight hundred and seventy-four.

Present, the honorable Lewis B. Woodruff, judge.

THE GOULD MANUFACTURING COMPANY
vs.
JOHN P. COWING ET AL.

A motion having been made at this term of the court by and on behalf of the defendants, upon affidavit of the defendant George Cowing, for a rehearing upon ground of newly discovered evidence, after hearing Mr. De L. Crittenden, solicitor for defendants, and Wm. F. Cogswell, esq., opposed, it is ordered that said motion be and the same hereby is denied, and injunction granted. Decree in accord with complainant's bill to be entered.

20 (Endorsed:) In United States circuit court for northern district of New York. Gould Manuf'g Co. vs. Cowings et al. Order denying rehearing, &c., March 19, 1874. De L. Crittenden, sol'r for def'ts. Filed M'ch 19, 1874.

21 U. S. circuit court, northern district of New York. In equity.
MARCH 21ST, 1874.

THE GOULDS' MANUFACTURING COMPANY
vs.
JOHN P. COWING, GEORGE COWING, AND PHILO COWING.

The above action having been brought on to a hearing on the pleadings and proofs therein, before the Hon. L. B. Woodruff, justice, and the said justice having ordered that a decree should be entered in favor of the complainant, in conformity with the prayer of the bill, and for a reference to ascertain the complainant's damages—

It is hereby adjudged, decreed and determined that the letters patent issued to the complainant herein as assignee of William H. Pollard for an improvement in gas pumps, dated August 8th, 1871, and more particularly set forth in the bill of complaint herein, were and are valid in law, and that the defendants infringe the rights secured thereby by the gas pumps manufactured or sold by them subsequent to the date
22 of the complainant's patent, which are further shown by plaintiff's exhibit E, and plaintiff's exhibits F and G, respectively;

and on motion of J. B. Perkins, solicitor for the complainant, it is further ordered, adjudged and decreed that an injunction issue out of this court, under the seal thereof, perpetually restraining the defendants, their agents, servants, and all persons acting under them, from making, using or vending the device or improvement in gas pumps described in said letters patent and secured thereby, and also perpetually enjoining the defendants as aforesaid, from making, using, or vending any such pumps as have been unlawfully made by the defendants as aforesaid, and from further infringing said letters patent.

And further ordered, that it be referred to John Norton Pomeroy, esq., acting as a master of this court, to take and state the account of the said defendants, and to report the number of pumps manufactured by the defendants in violation of said letters patent as aforesaid, and the profits of the said defendants, and damages the complainant has sustained by their said infringement of such letters patent since
23 the issuing thereof. And to that end the defendants are ordered to produce their books and accounts before such master, and to be examined in reference thereto.

And further ordered, that such accounting may be brought on before such master on eight days' notice; that his report shall stand confirmed unless excepted to in eight days after notice thereof, and that on the coming in and confirmation of such report the complainant have judgment for his damages so reported, with interest from the date of such report, and costs to be taxed.

L. B. WOODRUFF,
Circuit J.

24 Endorsed: U. S. circuit court, north. dist. of N. Y. The Goulds' Manufacturing Company vs. John P. Cowing et al. Decretal order. Filed M'ch 21, 1874.

25, 26 In the United States circuit court, northern district of New York.
In equity.

THE GOULDS' MANUFACTURING COMPANY
vs.
JOHN P. COWING, GEORGE COWING, AND PHILO COWING.

To the honorable the judges of said court:

In pursuance of a decretal order made and entered in this cause, and bearing date the 21st day of March, A. D. 1874, by which it was referred to the undersigned, John N. Pomeroy, acting as a master of this court, to take and state the account of the said defendants in the manner stated in said decretal order, and to ascertain and report to this court as otherwise decreed in said decretal order, a copy of which is hereto annexed, I, the undersigned, such acting master, do hereby report:

That I have proceeded to investigate the matter so referred to me, and that I have been from time to time, in pursuance of appointments made by me, attended by the complainant, by its officers and by Mr. J. B. Perkins, its counsel; and by the defendants in person, and by Elisha Foote, esq., and J. B. Murray, esq., their counsel; and that said defendants have produced before me their books of accounts and schedules made and taken therefrom, and have made a statement from such schedules, which is contained in the evidence taken by me and herewith

returned; and the said defendant Philo Cowing has been by me sworn and has testified under oath touching the matters so referred to me, and one of the officers of the plaintiff has also testified under oath touching the same matters; and their depositions were by me reduced to writing, and were signed by the said witnesses, and are hereto annexed, and are returned by me to this honorable court.

27 From such books of account, written schedules and examination of the parties, after hearing the arguments of the respective counsel thereon, I have arrived at and do hereby report the following conclusions of facts and of law, that is to say:

It appears from the defendants' testimony and their books, that the defendants, since the 8th day of August, 1871, the day of the issuing of the letters patent to the plaintiff, mentioned in the bill of complaint in this cause, have manufactured and sold, or sold, the gas pumps mentioned in the pleadings in this cause, and in the proofs taken therein, to the number of 323.

This number does not include any pumps manufactured by defendants since the date aforesaid, and not sold by them at any time, but remaining on hand entirely unsold.

Of this number thus sold, the purchasers returned to the defendants on account of defects in the manufacture, so that the sale thereof was cancelled and the pumps themselves destroyed, the number of 25.

The plaintiff admits the number of returned pumps, and only claims for the ballance, which is 298.

The plaintiff claims that it is entitled to the damages for the making and vending of this number (298) of pumps so made and sold by defendants. The defendants, conceding that the greater part thereof were made and sold since said last named date, claims that two several amounts thereof should be deducted therefrom, and they held liable for the remainder.

These two claimed deductions are as follows: (1) of these 298, thirty-three (33) were actually made before said last named date, and were actually on hand at that date. They had not been specifically sold nor bargained for, but the following facts existed: Prior to August 8th, 1871, one Winsor residing and doing business at Petroleum Centre, at the head of the oil regions in Pennsylvania, had given defendants general orders for their pumps. No particular pumps had been bought nor bargained for, but the said Winsor gave such general orders,

28 both by letter and personally during a visit at Seneca Falls, where defendants' shops are situated. The defendants were in the habit of sending the pumps to him by railroad, in parcels of from 6 to 12 and 15 at a time. The course of the trade was that the pumps were delivered to Winsor at the railroad station at Seneca Falls, Winsor paying the freight thereon, and defendants charging each shipment to him on their books as soon as the pumps were thus delivered at the railroad station. Winsor paid for them from time to time. The defendants' entire sales in Pennsylvania were to this one person, and their entire sales anywhere were to him, except seven (7) pumps sold to a person at Petrolia, in Canada. The defendants had delivered several lots of pumps to said Winsor in July, 1871, such delivery being made as above. The thirty-three pumps spoken of were all made before, and were on hand in defendants' shops at Seneca Falls, on the 8th day of August, 1871. They were delivered to said Winsor, in lots of 6, at the said railroad station, and in the manner above stated and in pursuance of the said Winsor's prior general order, viz, on the 9th, 10th, 14th, 17th, 19th and 25th of August, 1871, and were on those days, or within

a day or two after each delivery as aforesaid, charged to said Winsor on their books.

I find and report from the aforesaid facts, and from the testimony in reference thereto, that these 33 pumps were sold by the defendants subsequent to August 8th, 1871, and that the defendants are therefore liable to account for the same, and that they should not be deducted from the above sum of 298.

(2.) It is also claimed by the defendants that thirty-three (33) other of their pumps, should be deducted from the sum of 298, on the ground that they have not in fact been sold but remain the property of the defendants. In regard to this question, I find from the undisputed evidence the following facts: The only places where defendants sold any of these pumps were at Petroleum Centre, in Pennsylvania, and at Petrolia, in Canada; all of those sold at the former place were sold to one Winsor, and all of those sold at the latter place were sold to a single person. Winsor was not an agent of the defendants; nearly all the pumps sold by defendants were sold to him in the manner herein before described, upon his orders, general or special, and were at once charged to him, and defendants looked to him alone for payment.

Near the close of the year 1872, and in January, 1873, defendants sent to said Winsor, at said place, and at different times, pumps to the number in all of 34; these were sent to him not upon his orders, but upon the defendants' account, and on their own motion they were consigned to said Winsor. Immediately after sending them they were charged on the books of the defendants against said Winsor, in the same manner as all the other pumps sold to him had been charged; they remain so charged to this day. There is nothing on the defendants' books of account to show that these pumps were sent on consignment and on defendants' account. All these facts are uncontradicted, and are established by competent evidence.

In my opinion there is no competent evidence before me which shows anything more than the above facts in regard to these 34 pumps. The defendants were permitted by me to detail some other matters, under objection from the plaintiff's counsel I reserving my decision on the question by consent of counsel until the close of the case. Among other things, defendants spoke of a letter received by defendants from said Winsor, about a year ago, saying that thirty (30) of the pumps remained unsold, and were held by Winsor subject to defendants' order. The witness asked permission to produce said letter, but it has not been produced.

I decide as a matter of law, and so rule, that this testimony of the witness Philo Cowing as to what had been said to him, either verbally or by letter, as to the condition of the pumps last mentioned by the said Winsor, is wholly incompetent, and must be disregarded. The objection of the plaintiff's counsel to this testimony is therefore sustained.

This being so, the only facts proved as to these 34 pumps are as stated above: In November, December, 1872, and the first week in January, 1873, they were sent by defendants to Winsor, at Petroleum Centre aforesaid, upon consignment on account of the defendants, without any previous orders. They were charged on defendants' books, however, as though absolutely sold to said Winsor. No legal evidence is before me as to what has become of them, or their present situation or condition. The same facts substantially exist in reference to those pumps sent to a place in Canada called Petrolia.

iff's course of business in shipping the pumps at the expense of purchasers, and the plaintiff's ability, with its capital and machinery, to manufacture the additional number of 298.

The defendants object to this evidence, and claim that it is too indefinite to be taken as the basis of an estimate, and that the witness shows himself incompetent to state the fact correctly as to the cost of making the pumps; and that many other items necessarily enter into the cost of a pump which the witness has not given—such as interest on capital, cost of repairs, expense of selling, of collection, allowance for bad debts, salaries, and in short all other expenses of carrying on a manufacturing business. The defendants demand that I should disregard this evidence entirely. In answer to this claim I rule and decide as follows:

If the position of the defendants is correct, that many other items enter into the cost of a pump than those named by the plaintiff's witness, this was a matter to be proved to me by evidence furnished by the defendants themselves, either by the cross-examination of the witness or by introducing other witnesses of their own. I cannot be assumed to know these facts; they are not facts of which the court takes a judicial cognizance. The objection is in fact to the weight of the evidence, and not to its competency.

There is still another view: This evidence is not disadvantageous to the defendants as the case is presented to me; on the contrary, it is extremely advantageous to them. If this evidence as to the cost should be struck out of the case, the result would be not to take away the plaintiff's claim of profit, but to raise it from $47.71 to $81.25, the wholesselling price of each pump. It is proved by uncontradicted evidence that the plaintiff sold each of its pumps for $81.25. If, in compliance with defendants' request, I strike out all evidence of the cost of
35 these pumps, it follows that on the facts, the cost being nothing, the selling price would be all profit. This is one of the results of the defendants' declining to offer any evidence, and requiring me to decide this important matter upon a mere glimpse of the entire facts in elation to it. I overrule the objection.

In conclusion, I find and report that the plaintiff is entitled to recover as "damages" sustained by it by the sale of the aforesaid 298 pumps by the defendants as aforesaid, at the rate of $47.71 for each pump so sold by defendants, that being the whole profit which as appears from the evidence the plaintiff would have made from the sale of each entire pump. Applying this rate of damages to the whole number of pumps reported to have been sold, the plaintiff is entitled to recover 298 X $47.71, which amounts in all to the sum of $14,217.58.

Under rulings of the Supreme Court of the United States in similar cases, I do not allow any interest upon this sum. The plaintiff is entitled to judgment for fourteen thousand two hundred and seventeen dollars and fifty-eight cents ($14,217.58).

All of which is respectfully submitted.

JOHN NORTON POMEROY,
Special Acting Master.

Rochester, April 24, 1874.

(Endorsed:) Filed April 28, 1874.

Circuit court of the United States, northern district of New York. In equity.

THE GOULD MANUFACTURING COMPANY
vs.
JOHN P. COWING, GEORGE COWING, AND Philo Cowing.

Exceptions taken by the above-named defendants to the general report of John Norton Pomeroy, esq., acting as a master of this court, to whom this cause stands referred by the decree made herein, on the 21st day of March, 1874, and which report bears date the 24th day of April, 1874.

36 FIRST EXCEPTION.—For that the said master in his said report, in finding and stating the number of pumps manufactured by the defendants and referred to in said decree, has included in such number 33 pumps that were made prior to the 8th of August, 1871, as stated at fols. 6, 7, 8, 9, and 10 of said report, and has found that those 33 pumps were sold by the defendants subsequent to said 8th of August, 1871, and that the defendants are liable to account for the same, and has charged the defendants with the profits thereon in the account stated by him, whereas the defendants are not liable to the complainants for the making and selling of any of the said 33 pumps, and they should not have been included in any of said accounts.

SECOND EXCEPTION.—For that the said master in his said report, in finding and stating the number of said pumps that had been made and sold by the defendants since August 8th, 1871, has included therein 30 pumps that were sent to one Winsor, at Petroleum Centre, "not upon his orders, but upon the defendants account, and on their own motion," as stated in fol. 12. And for that the said master overruled and rejected the testimony given and offered by the defendants, that the said 30 pumps remained unsold, and were held by said Winsor subject to their order (fol. 14). And for that the said master in his said report has charged the defendants with the profits on said last-mentioned 30 pumps on the basis that they were not only made, but sold by the defendants.

The defendants also make the same exception to the decision of the said master in reference to the 7 pumps "sent to a place in Canada called Petrolia," and referred to in fol. 16 of the said report.

THIRD EXCEPTION.—For that the said master in his said report has found and stated that the damages or profits that the complainant is entitled to recover from the said defendants, in accordance with
37 the said decree, are the differences between the expenses of labor and materials in making said pumps, and the prices for which they were sold in the market; that said two items of cost at the complainant's works amounted to $33.54 on each pump and that they sold for $81.25, and that the difference, $47.71, multiplied by 298, amounting to $14,217.58, is the sum which the complainant is entitled to recover from the defendants; whereas there was no evidence before the master that there was any profit or advantage to the defendants, or damages to the complainants, by reason of the defendants' making, using, or selling any device set forth and claimed in the letters patent referred to in said decree, and the said master should have reported that there were no profits or damages that the complainant is entitled to recover in this suit.

And whereas, also, the complainant is not entitled to recover the profits of making and selling the whole of said pumps, but only for the parts thereof that were claimed in said patent. And the defendants except to the rulings of the master, stated at fol. 19 in his report, "that the plaintiff is entitled to recover, as its damages, the profits which it would have made had it received the orders for the manufacture and sale of these 298 gas pumps." And also to his decision, stated at fols. 24 and 25, that "the burden of proof is on the defendants to make out the separation and division of the profits" (that is, the profits arising from the patented devices) "after the plaintiff has shown the profits on the entire machine."

And the defendants also except to the rulings of the master, stated in his report at fols. 26 and 27, where, speaking of the profits arising from the parts of the pump claimed in said patent, he says, "the comparison must be made between the machine as it stands with its patented improvements and what would be left of the same machine if these improvements were taken away, and not between this machine with
38 its patented improvements and any other one having the same general character, not patented, and used in the business and sold in the market;" * * * "it is very plain that if the patented improvements on this gas pump are removed, there is nothing which can be called a machine;" and where he also says that he distinctly holds "a sort of construing the machine in the same way that a court construes a writing."

FOURTH EXCEPTION.—For that the said master, in the proceeding before him, and in taking and stating the account directed by the decree in this suit, overruled and rejected the testimony offered by the defendants and the interrogatory propounded to the defendants' witness.

Wherefore, the said defendants do except to the said general report, and appeal therefrom to the judgment of this court.

DE L. CRITTENDEN,
Solicitor for Defendants.

ELISHA FOOTE,
Of Counsel.

(Endorsed:) Filed May 4, 1874.

39 At a special term of the circuit court of the United States for the northern district of New York, held at Utica on the 10th day of July, 1874.

Present, Hon. Ward Hunt, justice.

THE GOULDS' MANUFACTURING COMPANY
vs.
JOHN P. COWING & OTHERS.

This cause having heretofore come on for a hearing upon defendants' exceptions to the master's report, and Mr. Foote having been heard for the defendants and Mr. Perkins for the complainants, and due deliberation having been thereon had,

Ordered that the third exception to the master's report herein be and the same is allowed;

And further ordered that such report be, and it hereby is, vacated and set aside, and also the order of reference to John Norton Pomeroy, and that it be referred to Charles Mason, acting as master of this court, to take and state the complainant's damages and the def'ts' profits
40 under the decretal order entered in this action, in accordance

with the opinion of the court, no costs of the reference before Mr. Pomeroy to be allowed the complainant

Allowed.

WARD HUNT.

SEPT. 2, 1874.

(Endorsed:) U. S. circuit court, north. dist. of N. Y. The Goulds' Manufacturing Company vs. John P. Cowing et al. Order vacating master's report, &c. Filed September 2, 1874.

41 U. S. circuit court, northern dist. of N. Y.

THE GOULDS' MANUFACTURING COMPANY }
vs.
JOHN P. COWING AND OTHERS. }

To the honorable judges of the said court:

In pursuance of a decretal order made and entered in this case and of an order of reference made to me on the 10th day of July, 1874, by which it was referred to me as a master of this court, to take and state the complainant's damages and the defendants' profits under the said decretal order of reference, I, the undersigned master of said court, do certify and report that I appointed a day for the hearing of the said matters, and that the said parties, with their counsel, appeared before me, and that I did hear the proofs and allegations of the said parties and the arguments of their counsel, and having considered the same, do find and report as facts that since August, 1871, the defendants have manufactured and sold two hundred and ninety-eight pumps, for which they are liable to account to the plaintiffs for the damages they
42 have sustained and the profits the defendants have made thereon, and that these pumps were sold by the defendants for $80 apiece. The cost of manufacturing them at Seneca Falls was thirty-three dollars and fifty-four cents apiece. The defendants had a manufacturing establishment at Seneca Falls, where they manufactured these 298 pumps, and the plaintiffs had a manufacturing establishment at the same place and had great facilities for manufacturing this kind of pumps, and could easily have manufactured these 298 pumps in additional to what they did make. I find as further facts from the evidence that the plaintiffs' pump, with their patented improvement, which they had introduced into the market, virtually controlled the market, and had superseded all the other pumps then in use for pumping gas, and the others were literally driven out of the market, as they could not be sold at the places where the plaintiffs' pump had been introduced. The defendants went into the very market where the plaintiffs' pumps had been introduced and where they had sold and where plaintiffs were
43 then supplying most of their pumps, and the defendants in fact went and employed Wenson, the former agent of the pl'ff, to sell the pumps for them, and he, from being the pl'ffs' agent in the locality, made very ready sale of the same pumps for the def'ts, and had not the def'ts interfered in urging the pumps which they manufactured upon this local market the pl'ffs would certainly have had the whole market to themselves, and would have beyond doubt have secured orders and supplied the demand of the market for the same number of pumps more than they did sell, as the def'ts furnished to 298 pumps. The pl'ffs were, by their agent, in the field furnishing pumps those oil regions, and would have supplied the market demand had not the def'ts inter-

vened and supplied to the market these 298 pumps. They have *I* sustained damage to the extent of the loss of the sale of 298, at a profit of $46.46 per pump.

It has been decided by the learned judge before this very case was heard on exceptions to the master's report that the pl'ff can only recover the profits made or the damages sustained by the pl'ffs in the
44 def'ts' use of the pl'ff' patented part of the pump, and many parts of the pump not covered by the pl'ffs' patent and were in known use they could not have the profits resulting from the manufacture and sale of the whole pump, and if he could not make the proof so as to sever the patented part from the use of the pump and show what profits the def'ts had made by the use of or what damage the pl'ffs had sustained by the use of his patented part of the pump, then the pl'ffs could only recover nominal.

We must therefore subject the case to this stern rule of law, however much may be the injustice of these pl'ffs. I do not think, however, there is any difficulty in this case as it now stands. It is not the case presented to the learned judge and who decided.

The proof now shows the plaintiff's pump, with his patented improvement, had virtually superseded the other pumps and had control of the market, so far so that none others could be sold for pumping gas. It follows as a consequence that the whole profits made by the def'ts were owing to the use of the pl'ff's patented improvement or addition
45 to this pump, as the market demands no other.

In conclusion, I find and report that the pl'ffs is entitled to recover as damages sustained by it by the manufacture and sale of the aforesaid 298 pumps by the def'ts, as aforesaid, $46.46 for each pump so sold by the defendants, which amounts in the aggregate to the sum of $13,845.08. No interest can be allowed on this sum.

All which is respectfully submitted.

February 1st, 1876.

CHARLES MASON,
Master in Chancery.

My charge, $100.—C. M.

46 (Endorsed:) U. S. circuit court. The Gould Manufacturing Co. vs. John P. Cowing and others. Report. Charles Mason, master. Filed Feb. 7, 1876.

47 Circuit court of the United States, northern district of New York.
In equity.

THE GOULD MANUFACTURING COMPANY
vs.
JOHN P. COWING, GEORGE COWING, AND Philo Cowing.

Exceptions taken by the above-named defendants to the general report of Charles Mason, esq., a master of this court, to whom this case stands referred by the decree made herein and an order of reference made to him, the said master, on the 10th day of July, 1874, and which report bears date the 1st day of February, 1876, and was filed with the clerk of this court on the 7th day of February, 1876.

FIRST EXCEPTION.—For that the said master in his said report states that "the cost of manufacturing them" (the 298 pumps made and sold by the defendants), "at Seneca Falls, was thirty-three dollars and fifty-

four cents ($33.54) a piece," and the said master in estimating the complainant's damages has deducted from the prices at which the defendants sold said pumps the *the* said sum of $33.54 only, and found
48 the balance to be the profits made by making and selling said pumps.

Whereas the said sum of $33.54 was the estimated cost, by one of the complainant's witnesses, of two items only of the expenses of making such pumps, to wit, the cost of labor and materials, and other items the expenses of making such pumps and all the expenses of selling them are entirely omitted by the said master, and the whole expenses of making and selling such pumps was much greater than $33.54.

SECOND EXCEPTION.—For that the said master in his said report finds and states "that the pl'ff's pump, with its patented improvement, which it had introduced into the market, virtually controlled the market and had superseded all the other pumps then in use for pumping gas, and the others were literally driven out of the market, as they could not be sold at the places where the pl'ff's pump had been introduced."

Whereas there was no evidence before the master or in the case that any part of the pumps made and sold by the pl'ffs contained the supposed improvement patented and belonging to the pl'ffs, or that they could in any proper sense be called the pl'ffs' pump. Nor was
49 any evidence given to show what was the improvement covered by the said patent, or that the pl'ffs or def'ts derived any advantage from the use of such supposed improvement.

THIRD EXCEPTION.—For that the said master in his said report finds and states that "the def'ts went into the very market where the pl'ff's pump had been introduced and where it had been sold, where pl'ff was then supplying most of its pumps, and the def'ts in fact went and employed Windsor, the former agent of the pl'ff, to sell the pumps for them.

Whereas there was no evidence in the case that the def'ts sold said pumps at any other place than at their factory in Seneca Falls, and whereas also there was no evidence that the def'ts ever employed said Windsor as an agent to sell said pumps or in any other capacity.

FOURTH EXCEPTION.—For that the said master in his said report finds and states that the pl'ffs "would have supplied the market demand had not the def'ts intervened and supplied to the market those 298 pumps. It has sustained damage to the extent of the loss of the sale of 298 pumps at a profit of $46.46 per pump."

50 And also for that he finds and states that "the proof now shows that the pl'ff's pump, with its patented improvement, had virtually superseded the other pump, and had control of the market so far so that none others could be sold for pumping gas; it follows as a consequence that the whole profits made by the def'ts were owing to the use of the pl'ff's patented improvement or addition to this pump, as the market demands no other."

Whereas the pl'ffs sustained no legal damage by the def'ts' sale of the said 298 pumps, and the proofs did not show that the pl'ffs' patented improvement had caused the pl'ffs' pump to supersede other pumps and control the market so that none others could be sold for pumping gas, and that the whole or any part of the profits made by the def'ts was owing to the use of the plaintiffs' patented improvement.

FIFTH EXCEPTION.—For that the said master in the concluding part of his report finds and states "that the pl'ff is entitled to recover as damages sustained by it by the manufacture and sale of the aforesaid 298 pumps by the def'ts, as aforesaid, $46.46 for each pump so sold by the def'ts, which amounts in the aggregate to the sum of $13,845.08.

vened and supplied to the market these 298 pumps. They have *I* sustained damage to the extent of the loss of the sale of 298, at a profit of $46.46 per pump.

It has been decided by the learned judge before this very case was heard on exceptions to the master's report that the pl'ff can only recover the profits made or the damages sustained by the pl'ffs in the
44 def'ts' use of the pl'ff' patented part of the pump, and many parts of the pump not covered by the pl'ffs' patent and were in known use they could not have the profits resulting from the manufacture and sale of the whole pump, and if he could not make the proof so as to sever the patented part from the use of the pump and show what profits the def'ts had made by the use of or what damage the pl'ffs had sustained by the use of his patented part of the pump, then the pl'ffs could only recover nominal.

We must therefore subject the case to this stern rule of law, however much may be the injustice of these pl'ffs. I do not think, however, there is any difficulty in this case as it now stands. It is not the case presented to the learned judge and who decided.

The proof now shows the plaintiff's pump, with his patented improvement, had virtually superseded the other pumps and had control of the market, so far so that none others could be sold for pumping gas. It follows as a consequence that the whole profits made by the def'ts were owing to the use of the pl'ff's patented improvement or addition
45 to this pump, as the market demands no other.

In conclusion, I find and report that the pl'ffs is entitled to recover as damages sustained by it by the manufacture and sale of the aforesaid 298 pumps by the def'ts, as aforesaid, $46.46 for each pump so sold by the defendants, which amounts in the aggregate to the sum of $13,845.08. No interest can be allowed on this sum.

All which is respectfully submitted.

February 1st, 1876.

CHARLES MASON,
Master in Chancery.

My charge, $100.—C. M.

46 (Endorsed:) U. S. circuit court. The Gould Manufacturing Co. vs. John P. Cowing and others. Report. Charles Mason, master. Filed Feb. 7, 1876.

47 Circuit court of the United States, northern district of New York.
In equity.

THE GOULD MANUFACTURING COMPANY
vs.
JOHN P. COWING, GEORGE COWING, AND PHILO COWING.

Exceptions taken by the above-named defendants to the general report of Charles Mason, esq., a master of this court, to whom this case stands referred by the decree made herein and an order of reference made to him, the said master, on the 10th day of July, 1874, and which report bears date the 1st day of February, 1876, and was filed with the clerk of this court on the 7th day of February, 1876.

FIRST EXCEPTION.—For that the said master in his said report states that "the cost of manufacturing them" (the 298 pumps made and sold by the defendants), "at Seneca Falls, was thirty-three dollars and fifty-

four cents ($33.54) a piece," and the said master in estimating the complainant's damages has deducted from the prices at which the defendants sold said pumps the *the* said sum of $33.54 only, and found
48 the balance to be the profits made by making and selling said pumps.

Whereas the said sum of $33.54 was the estimated cost, by one of the complainant's witnesses, of two items only of the expenses of making such pumps, to wit, the cost of labor and materials, and other items in the expenses of making such pumps and all the expenses of selling them are entirely omitted by the said master, and the whole expenses of making and selling such pumps was much greater than $33.54.

SECOND EXCEPTION.—For that the said master in his said report finds and states "that the pl'ff's pump, with its patented improvement, which it had introduced into the market, virtually controlled the market and had superseded all the other pumps then in use for pumping gas, and the others were literally driven out of the market, as they could not be sold at the places where the pl'ff's pump had been introduced."

Whereas there was no evidence before the master or in the case that any part of the pumps made and sold by the pl'ffs contained the supposed improvement patented and belonging to the pl'ffs, or that they could in any proper sense be called the pl'ffs' pump. Nor was
49 any evidence given to show what was the improvement covered by the said patent, or that the pl'ffs or def'ts derived any advantage from the use of such supposed improvement.

THIRD EXCEPTION.—For that the said master in his said report finds and states that "the def'ts went into the very market where the pl'ff's pump had been introduced and where it had been sold, where pl'ff was then supplying most of its pumps, and the def'ts in fact went and employed Windsor, the former agent of the pl'ff, to sell the pumps for them.

Whereas there was no evidence in the case that the def'ts sold said pumps at any other place than at their factory in Seneca Falls, and whereas also there was no evidence that the def'ts ever employed said Windsor as an agent to sell said pumps or in any other capacity.

FOURTH EXCEPTION.—For that the said master in his said report finds and states that the pl'ffs "would have supplied the market demand had not the def'ts intervened and supplied to the market those 298 pumps. It has sustained damage to the extent of the loss of the sale of 298 pumps at a profit of $46.46 per pump."

50 And also for that he finds and states that "the proof now shows that the pl'ff's pump, with its patented improvement, had virtually superseded the other pump, and had control of the market so far so that none others could be sold for pumping gas; it follows as a consequence that the whole profits made by the def'ts were owing to the use of the pl'ff's patented improvement or addition to this pump, as the market demands no other."

Whereas the pl'ffs sustained no legal damage by the def'ts' sale of the said 298 pumps, and the proofs did not show that the pl'ffs' patented improvement had caused the pl'ffs' pump to supersede other pumps and control the market so that none others could be sold for pumping gas, and that the whole or any part of the profits made by the def'ts was owing to the use of the plaintiffs' patented improvement.

FIFTH EXCEPTION.—For that the said master in the concluding part of his report finds and states "that the pl'ff is entitled to recover as damages sustained by it by the manufacture and sale of the aforesaid 298 pumps by the def'ts, as aforesaid, $46.46 for each pump so sold by the def'ts, which amounts in the aggregate to the sum of $13,845.08.

51 Whereas the said master should have reported that the said pl'ffs had sustained nominal damages only by reason of such sale. Wherefore the said def'ts do except to the said general report, and appeal therefrom to the judgment of this court.

DE L. CRITTENDEN,
Def'ts' Sol'r.

ELISHA FOOTE, *Of Counsel.*

52 (Indorsed:) U. S. circuit court. The Goulds' Manufacturing Co. vs. John P. Cowing, George Cowing, and Philo Cowing. Def'ts' exceptions. Fi ed May 1, 1876.

I hereby admit due service of copy of within exceptions. Dated Rochester, Feb'y 26, 1876.

J. B. PERKINS,
Pl'ff's Sol'r.

53 Circuit court United States, northern dist. of New York. In equity.

THE GOULDS' MANUFACTURING CO.)
vs.)
JOHN P. COWING AND OTHERS.)

The exceptions taken to the report of Charles Mason, esq., bearing date the 1st day of February, 1876, and filed with the clerk of said court on the 7th day of February, 1876, are hereby amended by adding thereto, immediately after the 5th exceptions, the two following, to wit:

6TH EXCEPTION.—For that the said master in taking the testimony before him should have overruled and rejected the testimony objected to by the def'ts' counsel touching the cost of making such pumps and the prices at which they were sold in the market, as irrelevant and immaterial.

7TH EXCEPTIONS.—For that the said master erred in adopting as a measure of the compl't's damages the profit arising from the manufacture and sale of the whole of the compl't's pumps, instead of the particular part thereof covered by compl't's patent.

DE L. CRITTENDEN,
Def'ts' Sol'r.

ELISHA FOOTE,
Of Counsel.

54 (Indorsed:) Circuit court United States, northern district of New York. The Gould M'f'g Co. vs. John P. Cowing and others. Amended exceptions. De L. Crittenden, def'ts' solicitor. Filed May 1, 1876.

We hereby admit due service of copy of within amended exceptions Rochester, April 18, 1876.

J. B. PERKINS.

55 At a special term of the circuit court of the United States of America, for the northern district of New York, in the second circuit, held at the city of Utica, on Friday, the 14th day of September, in the year of our Lord one thousand eight hundred and seventy-seven. Present, the honorable Alexander S. Johnson, circuit judge.

THE GOULDS' MANUFACTURING COMPANY
vs.
JOHN P. COWING ET AL.

This cause having heretofore come on for a hearing upon exceptions taken by the defendants to the report herein of Charles Mason, master, after argument by counsel for the respective parties, and due consideration had, ordered that said exceptions be, and the same are hereby, allowed and a decree for the plaintiffs, with nominal damages only, is ordered.

56, 57 United States circuit court, northern district of New York. In equity.

THE GOULDS' MANUFACTURING COMPANY
against
JOHN P. COWING, GEORGE COWING, AND PHILO Cowing. } November 7th, 1877.

This action having been brought to a hearing upon the pleadings and proofs herein, before the honorable L. B. Woodruff, justice, and the said justice having ordered that a decree should be entered in favor of the complainant in conformity with the prayer of the bill, and an injunction having been issued restraining the defendants from making, using, or vending the device or improvment in gas pumps, described in the letters patent, set out in the bill of complaint, and it having been referred to a master of this court to take and state the account of the said defendants and to report the number of pumps manufactured by the defendants in violation of said letters patent as aforesaid, and the profits of the said defendants, and the damages the complainant
58 has sustained by their said infringement of such letters patent, and the report of the master having been filed herein, on the first day of February, 1876, by which he finds that the defendants' profits on the sale of the machines manufactured by them in infringement of the complainant's right, were thirteen thousand eight hundred forty-five dollars, and eight cents ($13,845 08), and that the complainant was entitled to recover that sum as its damages herein, and exceptions to such report having been heard before Hon. A. S. Johnson, justice, and said justice having allowed such exception and ordered that the complainant should recover nominal damages herein :

Now, it is hereby ordered, adjudged, and decreed, that the defendants, their agents, servants, and all persons acting under them be, and they are hereby, perpetually enjoined and restrained from making, using, or vending the device or improvement in gas pumps, described in letters patent issued to the complainant herein, as assignee of William H. Pollard, for an improvement in gas pumps, dated August
59 8th, 1871, and more particularly set forth in the complaint herein; and also further ordered, adjudged, and decreed that the complainant recover of the said defendants the sum of three hundred ninety-six dollars and eighty cents for its costs and disbursements as taxed herein; and further ordered, adjudged, and decreed that the complainant recover of the said defendants the sum of six cents as and for its damages herein.

60 (Indorsed:) U. S. cir. court, northern dist. of New York. The Goulds' Manufacturing Company against John P. Cowing et al. Decree. Cogswell & Perkins, compl't's solicitors, Rochester, N. Y. Filed Nov. 8th, 1877.

61 Whereupon the said pleadings, orders, master's reports, exceptions to master's reports, and final decree, together with other papers filed in said cause, are duly annexed hereto, and this decree is duly signed and enrolled, pursuant to the rules and practice of this court, this 23d day of November, A. D. 1877.

CHARLES MASON, *Clerk.*

62 (Endorsed:) U. S. circuit court, north. dist. of N. Y. In equity. The Goulds' Manufacturing Company vs. John P. Cowing, George Cowing, and Philo Cowing. Final record. Cogswell & Perkins, complainant's solicitors. Damages, $0.06; costs, 396.80—$396.86. Filed November 23, 1877, 4 o'c p. m.

63 U. S. circuit court, northern district of New York. In equity.

THE GOULDS' MANUFACTURING COMPANY
vs.
JOHN P. COWING, GEORGE COWING, AND PHILO COWING.

On this 9th day of September, 1873, before me, a special examiner, duly appointed upon the stipulation of the solicitors for the respective parties to this suit, appeared the said plaintiff, by Mr. William F. Cogswell, of counsel for said plaintiff, and also the said defendants, by Mr. E. G. Lapham, of counsel for said defendants, when the following proceedings were had:

The plaintiff offers in evidence letters-patent of the United States issued to the Goulds' Manufacturing Company, assignee of William H. Pollard, for an improvement in gas-pumps, dated August 8th, 1871, which are by me received, and marked Plaintiff's Exhibit A.

Plaintiff calls as a witness WILLIAM H. POLLARD, who, having been duly sworn, upon his direct examination by Mr. Cogswell, testifies as follows:

Q. Where do you reside; what is your age and occupation?

A. I reside in Seneca Falls; I am 37 years old, and am by occupation a machinist.

Q. Are you connected with the plaintiff in any way; and if so, in what capacity?

64 A. I am in the employ of the plaintiff as mechanical superintendent of their works.

Q. How long have you been thus employed by the plaintiff?

A. Since about the first of November, 1867.

Q. Where do the plaintiffs carry on business?

A. At Seneca Falls, N. Y.

Q. Are you acquainted with the defendants and their place of business; and if so, where do they carry on business?

A. I am; their place of business being at Seneca Falls, N. Y.

Q. What is the business carried on by the plaintiff and defendants, respectively?

A. The plaintiff manufactures iron pumps and other iron goods; the defendant also manufactures iron pumps principally.

Counsel for the plaintiff shows witness Exhibit A, and asks him if he is the William H. Pollard named therein.

A. I am.

Q. Are you familiar with the device described in the drawings and specifications of Exhibit A?

A. I am.

Q. Have you been engaged in the manufacture of pumps made in accordance with those specifications; and if so, where and for whom?

A. I have been in charge of a shop where those pumps were being manufactured under my supervision. I have been in charge of the plaintiff's shop, which is the one I refer to.

Counsel for the plaintiff now produces a model, which is received by me and marked Plaintiff's Exhibit B.

Q. State whether that model correctly represents the apparatus shown and described in Exhibit A.

A. It does.

Plaintiff's counsel produces an iron valve-casing, which is marked by the commissioner Plaintiff's Exhibit C.

Q. Describe Exhibit C.

65 A. Exhibit C is a valve casing removed from a full-sized gas pump, manufactured by the plaintiff, and is manufactured according to Exhibit A.

Q. What is the size of the pump of which Exhibit C is a valve casing?

A. A pump of twelve-inch bore.

Q. State what, if anything, you know of the defendants having manufactured pumps according to the plan described in Plaintiff's Exhibit A?

A. I have seen in the defendants' shops at Seneca Falls, the rough castings for pumps precisely similar to the pumps manufactured by the plaintiff under its patent. I have seen those pumps finished standing in front of the defendants' shop, awaiting shipment. Have seen them taken from there by a team to the depot. Have seen them in stores in the oil regions of Pennsylvania offered for sale, and have seen them in use on the oil wells.

Q. State whether the defendants impress upon their pumps of which you have spoken, any name or other device; and, if so, what is it?

(Counsel for the defendants objects to this question on the ground that the fact can only be proved by the production of the device and not by paroi.

Evidence received by me subject to objection.)

A. The pumps which I speak of as having seen, have cast upon them in raised letters the name "Cowing & Co., Seneca Falls, N. Y."

Q. When was it that you saw in the defendants' shops, the rough castings of the pumps of which you have spoken?

A. I think it was in the spring of 1872.

Q. Have you seen those castings upon more than one occasion in the shops?

A. Upon only one occasion, inside the shop.

Q. State whether the pumps which you saw outside the shop, and which you describe as finished, were put together.

66 A. The pumps which I saw outside the shops were finished and put together fit for use.

Q. How did those pumps, which you speak of as having seen outside the shops, compare with the model, Exhibit B, and with the pumps manufactured by the plaintiff?

(Counsel for the defendants make the same objection as before.

The evidence is received by me, subject to the objection.)

A. The pumps which I saw outside the shops were precisely similar in every essential respect.

Q. From how early a period have you seen pumps of the character you describe, on the premises of the defendants, finished and ready for shipment?

A. The first which I saw on the defendants' premises was in August, 1871, somewhere from the 10th to the 15th of August.

Q. Down to how late a period have you seen the pumps which you described on the defendants' premises ready for shipment?

A. I have seen similar pumps on their premises within the last three months.

Q. State whether you have seen the pumps of which you speak transported from time to time from the defendants' works to the railroad depot during the period from August to the period last mentioned by you.

A. I have seen them as they went by our shop in the wagon, being taken to the depot.

Q. Do the defendants manufacture, or have they manufactured, more than one size of this pump?

A. I saw the castings for two sizes of those pumps in their shop.

Q. What were they?

A. The one I believe the ten-inch pump, ten-inch bore, the other fifteen.

Counsel for plaintiff shows the witness a valve casing which the commissioner marks Plaintiff's Exhibit D, and asks witness:

Q. What is that?

67 A. A valve casing removed from a finished pump, made by Cowing & Company, of Seneca Falls.

Q. What is the size of that pump?

A. I cannot swear positively to the size, as I have never measured the pump.

Q. Do you know where the pump from which that was removed now is?

A. I believe that the pump from which that was removed is at Canandaigua. There is where I last saw it.

Q. Did you obtain this pump from which you removed this valve casting, Exhibit D, and, if so, where?

A. I did not obtain it.

Q. Where did you first see it?

A. I first saw it at the plaintiff's works, at Seneca Falls.

Q. Is the pump of which Exhibit D is a part one of the large or smaller size manufactured by the defendants?

A. One of the large size.

Q. Was there any difference between the larger and smaller sizes manufactured by the defendants?

(Counsel for the defendants makes the same objection as before, and the evidence is received subject to the objection.)

A. There was the necessary difference of size; a very little difference in outward appearance, and no difference in principle.

Adjourned until 2 o'clock p. m.

SEPTEMBER 9TH—2 o'clock p. m.

Present, the counsel for the respective parties.

On his cross-examination by Mr. LAPHAM, the witness William H. Pollard testified as follows:

Q. Were you ever in the employ of the defendants; and, if so, in what capacity and for how long a period?

68 A. I was in the employ of the defendants, first as a machinist; then for a time as a foreman in one of their rooms, for a period of some six months, I believe; then again as a machinist after they had

employed another man to fill my place as a foreman. I think the whole term of my employment by them was nearly two years. I can't say positively, but I think I went there in 1861.

Q. Were they the manufacturers of valve pumps during the period you were in their service?

A. They were.

Q. Did you know at that time that the defendant George Cowing was giving his attention to inventions connected with the manufacture of valve pumps?

A. I knew George Cowing as superintendent of Cowing & Co.'s works, and believe he was using every endeavor to improve the goods of their manufacture.

Q. Did you know a work entitled the "Engineer's and Mechanics' Drawing Book," a Scotch work, published in the year 1858, containing plates and descriptions of inventions for valve pumps?

A. I did know a work of that title; don't know the date of publication. The book incidentally mentions pumps as connected with engines.

Q. Do you remember while in the employment of the defendants of having conversations and discussions with the defendant George Cowing on the subject of valve pumps, in connection with the drawings and descriptions in said book?

A. I do not.

Q. Did you know or learn the fact, while there, that the said George Cowing had made an unsuccessful application for a patent for an improvement in valve pumps, and was the improvement described in that application the subject of conversation between you?

(Counsel for the plaintiff objects to this question as immaterial under the answer in this case.

Evidence received by me subject to the objection.)

A. I have no recollection of having had any such knowledge at that time, nor any such conversation.

69 Q. When was your attention first directed to the subject of the improvement claimed in the plaintiff's patent?

A. I believe along in the spring of 1870.

Q. In what month?

A. I can't be positive in these dates without some data to go by. I have minutes by which I could refresh my recollection, but they are not here.

Q. By what incident or circumstance was your attention so called to it?

A. The fact that the plaintiff had been selling rotary pumps for a similar purpose. The sale of rotary pumps having fallen off, this pump was devised to fill the place.

Q. Were you at that time in their employment?

A. I was.

Q. What suggested to you the arrangement of valves claimed in the plaintiff's patent?

A. I cannot tell.

Q. Had you never seen any pump or drawing of pumps containing a similar arrangement, or read any description of the same?

A. I had not.

Q. What was the consideration of the transfer made by you to the plaintiff?

(Objected to by plaintiff's counsel as immaterial.

Evidence received subject to the objection.)

A. I was in the employment of the plaintiff at a stated salary, one

condition of my contract with them being that any patents which might be granted to me during the time of my contract should be assigned to the plaintiff.

Q. When did the plaintiff commence the manufacture of pumps after the manner described in Plaintiff's Exhibit B?

A. In the summer of the year 1869 or 1870, I can't be positive which. I speak from memory.

Q. Has it continued to manufacture and sell them ever since?

70 (Objected to by plaintiff's counsel as immaterial under the answer in this case.

The evidence is received subject to the objection.)

A. It has.

Q. Upon any portion of those so made and sold were the letters "patent applied for" cast or contained? If so, during what period?

(Objected to by plaintiff's counsel on the ground last stated.

Evidence received subject to the objection.)

A. All pumps made previous to August, 1870, had those letters cast on them.

Q. Upon those made and sold since August, 1870, were those words omitted?

A. Those words were omitted on the castings made since then.

Q. Has any wording or lettering been put upon those manufactured since the patent was issued; and, if so, what?

(Objected to by plaintiff's counsel for the reason last stated.

Evidence received subject to the objection.)

A. The words "patented August 8, 1871."

Q. Do you mean to state that on those manufactured before the application for the patent the words "patent applied for" were contained?

A. I don't know certainly whether they were on any before the patent was applied for or not, but believe that few, if any, were made without those letters before August, 1870.

Q. Did you know of the first rejection by the Patent Office of the application for the plaintiff's patent, and the grounds of such rejection by the Commissioner of Patents, or were you informed of the same very soon after it was made?

71 A. I was informed of the rejection and of the grounds therefor soon after the rejection was made.

Q. Were not the words "patent applied for" dropped from all castings for pumps made after such rejection?

A. I know that the words were dropped from the pumps; whether before or after the rejection I cannot say.

Q. Before the renewal of the application on the 6th of January, 1871, and its second rejection on the 11th of January, 1871, had you seen the model and specifications, or a copy of the model and specifications, of the inventions claimed by T. C. Smith and William Crofton Moat, or in any other way had you learned the substance of their inventions?

A. I had not.

Q. Did you know or learn of such renewal and second rejection?

A. I did.

Q. Who made or suggested the amendments to your application contained in the letter bearing date July 21st, 1871, addressed to the Commissioner of Patents?

(Objected to by plaintiff's counsel as immaterial under the answer.

Evidence received subject to objection.)

A. I suggested the amendments myself.

Q. To whom?

A. To our patent attorney at Washington, whose name I forget.

Q. Before doing so did you become familiar with the inventions described by the said Smith and Moat respectively, as found on the files of the Patent Office at Washington; and did you examine them personally?

A. I did examine their drawings and specifications.

Q. Did you not examine their models, or either of them?

A. Not previous to the making of the application, or letter.

72 Q. Have you since ever seen or examined the model presented by said Smith; and, if so, when and where?

A. I saw the model at Washington in the Patent Office; I supposed it to be Smith's model; at the Patent Office in Washington, in the last of July, 1871.

Q. Of what material was it?

A. I cannot tell.

Q. Are you sure you saw the model made by Smith, or only that made by Moat?

A. I saw five or six models which were brought into the examiner's room, by order of the examiner, and think the model of Smith was one of the number.

Q. Are you sure that the model of Smith connected with his application of April 25th, 1865, was among the number?

A. I can only say that as the models and papers connected with the former rejections were brought to the examiner's room, together with some others not mentioned, I think I saw Smith's model there.

Q. Are you certain of it?

A. I am not.

Q. Do you not know that the defendants were quite largely engaged in the manufacture of pumps substantially like the one described in Exhibit B before you made the application of the 21st of July, 1871?

A. I do know that they were largely engaged in the manufacture of pumps; do not know of their manufacturing any pumps similar to the Plaintiff's Exhibit B previous to about the 1st of July, 1871, but believe they did between the 1st and 21st of July, 1871.

Q. Did you know that they were engaged in making them before you went to Washington to make the amended application?

A. I did.

Q. Did you know of a letter, dated the 18th of July, 1871, addressed to the Commissioner of Patents, in your behalf, appointing James L. Norris as associate of J. Frazer & Co., of the city of Rochester, in the matter of your application, and who caused it to be written?

73 A. I may have known it at the time, but have no recollection of it now.

Q. Do you remember what day you started for Washington, and what day you arrived there?

A. I do not.

Q. Were you not there before the 21st of July?

A. I was there the day the last application was made; I arrived there day before the application was made.

Q. Do you not remember that the letter appointing Norris was procured from Frazer & Co., by whom it was written, and that you carried the same to Washington?

A. I have no distinct recollection of that kind.

Q. You say you have no distinct recollection; have you any recollection on the subject, or any impression?

A. I have no recollection about any such letter. I have no impression whatever in regard to it.

Q. Was Norris the person with whom you conferred at Washington, and who wrote the amendments to the specifications?

A. Since hearing the name of Norris, I now think that was the name of Burke, Frazer & Osgood's agent in Washington with whom I conferred.

Q. Have you stated, or intended to state, that the defendants, since January, 1872, have been making the same kind of pump which they were making in the summer of 1871, when the patent was granted?

A. I have stated that I have seen pumps going from their works at various times since that time, which to all outward appearance were precisely the same as the pumps shipped by them before that time, and the same as Plaintiff's Exhibit B.

Q. Did you examine them, or any of them, or know their construction; or do you now know the same?

A. I have never examined one of their pumps, knowing it to have been built since that date.

Q. Do you know when Exhibit D was made?

A. I do not.

Q. When was Exhibit C made?

74 A. I can't say definitely. It was made some time in the year 1872.

Q. Were its various parts cast in the same moulds used prior to July, 1871?

A. Its various part were made from the same patterns used prior to July 21st, 1871.

Q. Did you examine the castings you saw in the defendant's shop in the spring of 1872?

A. Not to make an accurate examination of them.

Q. Can you state they were in their construction of valve casings like Plaintiff's Exhibit D?

A. Those which I saw were.

Q. How many?

A. I could not say.

Q. Were they old or new castings?

A. I could not tell.

Q. Can you tell where they were cast, or whether they have ever been used?

A. The castings which I saw in their shops had never been used, neither do I know they ever have been. I do not know when they were cast.

Q. Had the pump from which you took Plaintiff's Exhibit D ever been used?

A. It had not.

And the witness on his redirect examination by Mr COGSWELL testifies as follows:

Q. How long before your original application for a patent was it that your attention was directed to the subject of the improvement claimed in the plaintiff's patent?

A. I could not without memoranda answer questions definitely with regard to dates or lengths of time.

Q. Have you those memoranda here, or are they accessable to you here?

A. There is a statement here which I myself made up from my own memoranda, from which I can gather dates.

Witness, referring to memoranda, says his attention was first called to the improvement in gas pumps in the spring and summer of 1869.

75 Q. Do you recollect when your original application for a patent was made?

A. I do not recollect the date.

And being recross-examined by Mr. LAPHAM, the witness testifies:

Q. What is the memoranda to which you referred to refresh your recollection, and for what purpose was it made?

A. The memoranda is a statement containing the dates and other events connected with this gas pump made by myself for the information of the plaintiff's counsel.

Q. Does it contain a statement relative to the application of the 21st of July, 1871?

A. It, I believe, refers to that occasion.

Q. Will you please look at it and see whether it refreshes your recollection in respect to the letter appointing Norris?

A. There is nothing in the memoranda bearing upon that point.

Redirect:

The witness is shown a certain pump, marked "Cowing & Co., Seneca Falls, N. Y.," and is asked:

Q. Is that the pump from which you took the valve casing heretofore introduced in evidence and marked Plaintiff's Exhibit D?

A. It is. The pump is offered in evidence by the plaintiff, and is by me received and marked Plaintiff's Exhibit E.

Q. Do you know of one or more of the pumps manufactured by the plaintiff having been sold and delivered by it to the defendants?

A. I do.

Q. Do you recollect the time; and, if so, when?

A. One in the fall of 1869; another in the early spring of 1870.

Q. Have you examined this pump, Exhibit E?

A. I have.

76 Q. Is it similar to the pumps sold by the plaintiff to the defendants?

A. It is.

Q. Are there any differences between it and the pumps so sold?

A. There is a difference in size; no difference in any other respect.

Q. Please tell us why the words "patent applied for," were left off from the pumps made by the plaintiff for a while after August, 1870, as stated in your cross-examination.

A. The pumps manufactured previous to August, 1870, all had a round base similar to the base of the model, Plaintiff's Exhibit B. On those pumps the name "The Goulds' Manufacturing Co." was cast on the base. About the 1st of August, 1870, a part of the plaintiff's buildings was burned; among others, the building in which most of its patterns were stored, and with it the patterns for the gas-pumps. When we made new patterns after that time, a base was made square in form, upon which we did not find it practicable to put the name of the company. We then put the name of the company in the same place on the new patterns formerly occupied by the words "patent applied for" on the old ones.

Q. Why was it not practicable to use the circular base?

A. We were informed by parties engaged in putting up these pumps that the base such as we had been making was considerably larger in diameter than the timber upon which pumps were usually

fastened. Therefore some of the bolt-holes in the base came outside the timber, and were useless. When we made the new base we made it square and got as many bolts for holding-down the pump as had been originally designed to put in the round base.

77 SEPTEMBER 26TH, 1873—10 o'clock a. m.

Present, the counsel for the respective parties.

The witness William H. Pollard being recalled, testifies on his redirect examination by Mr. COGSWELL as follows:

Q. In your testimony when last examined you stated the dates of the sale of pumps by the plaintiff to the defendants as the fall of 1869 and the spring of 1870. Was that correct; and, if not, what are the correct dates?

A. It was not correct. It should have been the fall of 1870 and the early spring of 1871.

And on his recross-examination by Mr. LAPHAM the witness testifies:

Q. Had those pumps upon them the words "patent applied for?"

A. I think the first one had, and the second had not.

Q. Were any sales made by the plaintiff to the defendants until after the second rejection of your application to the Patent Office?

A. I do not know the date of the rejection, and therefore cannot say.

Q. Had you not heard of the rejection before such sales were made?

A. I heard of the rejection when it occurred, but don't know whether the date was before or after the sale of pumps.

Q. Is there not room upon the base of the pumps made since August 1st, 1870, for the words "patent applied for?"

A. There is not room to put letters of any size making a word of any length in any one place.

Q. Give the dimensions of the base.

A. It is about 18 inches square, and the thickness of the material is about one-half inch. The base referred to is the base for ten-inch pump made immediately after August 1st, 1870.

78 Q. Was there not room on the valve-box for those words?

A. Those words might have been put on in small letters.

Q. On the letters being issued did you not put upon the valve-box "patented August 8th, 1871?"

A. We did, in small letters.

Q. What sized letters?

A. I think about five sixteenths of an inch.

Q. Don't you know that those words, "patent applied for," your application having been twice rejected, were not considered any longer material?

A. I know that I did not consider them material at any time, either before or after the rejection.

Q. Who put the words on the pattern in the first instance?

A. They were put on by my direction, acting under instruction of the plaintiff.

Q. Did you have any direction to discontinue their use?

A. I did.

(The witness desires to add further to his answer, and the counsel declines to receive it.)

Q. From whom?

A. From Mr. James H. Gould.

Q. Who is James H. Gould?

A. Treasurer of the plaintiff.

Q. Is there not room on the cylinder heads for the words "patent applied for?"

A. There is.

Q. Is it not customary, when you purchase an article of the defendants containing their name, to chip off the name before disposing of it?

(Objected to by plaintiff's counsel as immaterial. The evidence is received subject to the objection.)

A. It is in most cases.

Q. Is not that the general custom among dealers, so far as you know?

A. It is among pump manufacturers in Seneca Falls.

79 Q. Don't you know the pumps sold by plaintiff to defendants were purchased by the defendants to fill orders from their customers?

A. I do not.

Q. Were you not so informed at the time they purchased?

A. We were so informed by the defendants.

Q. Did they afterwards apply to plaintiff to purchase more pumps, and did not plaintiff refuse to sell?

A. Not to my knowledge.

Q. Who was with you when you saw the pumps in the defendants' shop, as stated on your direct examination?

A. One or the other of the defendants.

Q. What part of the shop were they in?

A. I think they were in their tall six story building.

Q. When was it?

A. It was, I think, in the winter of 1871 or spring of 1872.

Q. Do you know what has become of them?

A. I do not.

And being re-examined by Mr. COGSWELL, the witness testifies:

Q. You were asked, did you have any direction to discontinue the use of the words "patent applied for?" What was it you wished to add to your answer as taken by the examiner?

(Objected to by defendant's counsel on the ground that it is immaterial, and the witness has no right to make a voluntary statement. Received subject to the objection.)

A. After getting the patterns completed for the ten-inch gas pump, in the fall of 1870, I took the pattern and showed it to Mr. James H. Gould, and asked him where we should put the name. In talking it over with him we concluded to leave off the words "patent applied for," and to put the name in the place formerly occupied by those words.

80 Q. Had the rejection of your application by the Patent Office anything to do with the omission of the words "patent applied for" from the pump?

A. So far as my knowledge extends it had no connection whatever with it.

WM. H. POLLARD.

EDWARD M. YOUNG being called by the plaintiff, and being duly sworn, and examined by Mr. MORGAN, testifies as follows:

Q. Where do you live? What is your age and business?

A. I live in Seneca Falls, N. Y. I was 21 years of age on the 30th of May, 1873. I work in the machine shop at the Goulds' Manufacturing Co.

Q. Did you formerly work for the defendants; and, if so, when?

A. I did. I commenced working for them in 1871, in April, and worked for them in their shop until 1872.

Q. What did you do in their shop?

A. I worked on pump work.

Q. Did you see in their shop a gas pump manufactured by the plaintiff?

A. I saw a pump with their name on it in their shop, and was told it was manufactured by the plaintiff.

Q. Who told you so?

A. I don't remember.

Q. Was it commonly talked about the shop that it was made by the plaintiff?

(Objected to by the defendants' counsel as hearsay, and not admissible unless in the presence of one or more of the defendants. The evidence is received subject to the objection.)

A. I couldn't say who it was that I heard say so.

Q. Was this pump that you saw there like those manufactured at that time by the defendants in the parts upon which you worked?

A. It was.

81 Q. Upon what parts did you work?

A. I bored them and planed the cylinder and polished them.

Q. Did you work about the valves there?

A. I did; I planed them and fit the caps for them—I mean the valve box.

Q. Where have you worked since you worked there?

A. I worked for Charles Crane.

Q. Since you have been employed by the plaintiff have you worked upon the same parts of the pump as you did while in the employ of the defendants?

A. I have.

Q. Are they similar to the parts upon which you worked while in the employ of the defendants?

A. They are.

Q. Is there any difference between them?

A. There is not in the openings. I should think there was not; I couldn't say for certain though.

Q. Did you know what was done with the pump which you saw there with the plaintiff's name upon it?

A. I don't know what became of it.

Q. Was it ever sent away from the factory?

A. It was taken out of the room I worked in. I don't know what was done with it though.

Q. Where was it kept while you knew of its being in the shop?

A. I first saw it in the small store-room upstairs; and the next time I saw it was in the room I worked in called the machine shop.

Q. How long was it there?

A. I couldn't say; I don't know.

Q. Before it was sent away, did you do anything upon it; and, if so, what?

A. I chipped the name off from it.

And upon his cross-examination by Mr. LAPHAM, the witness testifies:

82 Q. Do you mean to testify that the valves and valve boxes made by the defendants during the time you were in their employment were all alike and in the same form?

A. They changed their openings while I worked for them; I can't say when. I don't know anything about the valves; I worked on the valve boxes.

E. M. YOUNG.

DEFENDANTS' EVIDENCE.

SEPT. 26TH, 1873—11 o'clock a. m.

To maintain the issues on their part, the counsel for the defendants offers in evidence a certified copy of the file wrapper and contents of the letters patent granted to William H. Pollard, August 8th, 1871.

Received by me, and marked "Defendants' Exhibit No. 1."

The defendants' counsel next offers in evidence a certified copy of the specifications, petition, and other papers, on the application of T. C. Smith for an improvement in pumps, filed in the Patent Office, April 20th, 1865.

Received and marked "Defendants' Exhibit No. 2."

The defendants call as a witness GEORGE COWING, who, being duly sworn, testifies on his direct examination by Mr. LAPHAM as follows:

Q. What is your name, age, and occupation; and where do you reside?

A. George Cowing; age 37; reside in Seneca Falls, and manufacture pumps.

Q. Are you one of the defendants? If so, state the name of your firm, and how long you have been a member.

A. I am. The name of the firm is Cowing & Co. I have been a member of the same since 1859.

83 Q. For what purpose were the pumps spoken of by Mr. Pollard, purchased by your firm of the plaintiff, and what was done with them?

A. They were purchased to supply our legitimate trade, and were so disposed of.

Q. Do you remember how long any of them were kept on hand?

A. They were shipped in a very short time after we received them. They were shipped to our customers.

Q. Was the name of the plaintiff as manufacturer chipped off before they were so shipped?

A. It was.

Q. Is that customary among pump manufacturers at Seneca Falls where they purchased each other's wares?

A. It is.

Q. Do you remember the pump-castings spoken of by Mr. Pollard, which he states he saw in one of your shops in the winter of 1871 or spring of 1872?

A. I do.

Q. When were they cast?

A. In the spring of 1871.

Q. Where are they now?

A. We have them still on hand.

Q. Have you seen the plaintiff's Exhibits D and E?

A. I have.

Q. When were they manufactured?

A. The latter part of June or the first of July, 1871, and one of the first batch we made.

Q. When did you commence the manufacture of pumps of that description?

A. In the spring of 1871.

Q. How many castings had you made before the 8th of August, 1871?

A. About seventy.

Q. Do you remember how many of them you had sold or shipped away before the 8th of August?

A. They were all sold, but the exact number shipped away I do not remember.

Q. Was your firm engaged to manufacture them; and, if so, by whom?

84 A. It was by George W. Winsor, of Petroleum Center, Pa.

Q. Who furnished your firm the model or plan for the manufacture of the same?

A. George W. Winsor gave us the dimensions and proportions, and told us to follow a similar plan to the Gould Manufacturing Company's.

Q. Have you cast any pumps after the models Exhibits D and E since the 8th of August, 1871; and, if so, about how many?

A. We have—about sixty-one or sixty-two.

Q. When was that done?

A. Since the 8th of August, 1871; within about two months of that time.

Q. Have you manufactured gas pumps since the period last named? And, if so, state how they differ, if they do differ, from Exhibits D and E.

A. We have. The directions of the induction and eduction passages to and through the valve casing to the cylinder are entirely different; but the looks are similar on the exterior.

Q. State whether you are an inventor. If so, how long have you been such, and for what inventions, if any, have you obtained letters patent?

A. I have obtained several patents: the first one in 1856, for fire engines; and in 1861, for a cylinder polisher; in 1863, for an universal finisher; and several patents since for pumps. They were my own inventions.

Q. Are you acquainted with the drawings, specification, and other papers relating to the application of T. C. Smith for an improvement in pumps, and also with the model filed by said Smith in the Patent Office, referred to in Defendants' Exhibit No. 2?

A. I am.

Q. Have you the original model filed by said Smith? If so, state when and from whom you obtained it.

A. I have. I went to the Patent Office a year ago this last winter, and they informed me that it had been given to the High School
85 in Philadelphia. I made an application to the principal for the use of it as an exhibit in this suit, and he sent it to me by express, with the understanding that it should be returned when we were through with it. It was received about the 1st of September, 1873.

Adjourned until 2 o'clock p. m.

SEPTEMBER 26TH, 1873—2 o'clock p. m.

Present, the counsel for the respective parties.

Examination of George Cowing by Mr. LAPHAM resumed:

Q. Are you also familiar with the specifications and claim of the plaintiff's patent?

A. I am.

Q. Have you anything showing the course and direction of the passages in the plaintiff's patent?

A. I have.

The witness here produces a rough model, which is received and marked Defendants' Exhibit No. 3.

Q. Describe the passages as shown by this model in connection with Plaintiff's Exhibit B.

A. The direction of the induction passage to the valve casing, and through it over one valve into a central passage to the cylinder, and returns through the central passage and under the eduction valve to the eduction passages of the pump, being a correct track followed by the gas in entering plaintiff's pump, and its passage through and exit from it.

Q. Have you a like representation of the passages contained in the specification and model of T. C. Smith?

A. This exhibit is a perfect copy of it.

The witness here produces a model which is received and marked Defendants' Exhibit No. 4, and is asked:

Q. Describe the passages as shown by this model in connection with Plaintiff's Exhibit B.

A. They are exactly alike.

Q. In these models Nos. 3 and 4, which is the induction and which is the eduction branch of the wire, holding it with the valve-box towards you?

86 A. The left hand wire is the induction passage, and the right hand wire is the eduction passage. The central part shows the passage into the cylinder, and the return from it. The crooked part of the central passage shows where the gas bends down into the cylinder.

Q. Are the inventions described in Plaintiff's Exhibit B and in the model and specifications of T. C. Smith the same in all respects, or do they differ; and, if so, in what respect?

(Objected to on the ground that it does not call for the opinion of the witness as to any question of mechanics, but leaves him to determine what are the inventions illustrated by the Plaintiff's Model B, and described in the specifications of T. C. Smith.

Received subject to the objection.)

A. The induction and eduction passages to and through the valve casings to the cylinder are identically the same in each, and there is only a difference in the exterior. The induction and eduction passages to and through the valve casings constitute the pump proper. As long as the passages are the same the exterior can be made in any shape or form, but the pump proper would still be the same.

Q. Can these passages be applied to every description of pump?

A. They can.

Q. Have you a model showing the passages of the pump now manufactured by the defendants?

A. I have.

Witness produces model, which is received and marked Defendants' Exhibit No. 5.

Q. Describe this in connection with Plaintiff's Exhibit B, and state how it differs from it.

A. The exhibits show the difference a great deal better than I have the language to describe it. The induction passage to the valve casing after passing through the eduction valve, instead of going into a

87 central port like Plaintiff's Exhibit B, enters the cylinder by a port perpendicular over the induction port, and on its return

passes in a diagonal line under the eduction valve to the eduction passage. The ports to the cylinder, instead of being in the center like plaintiff's, are on each alternate side of the centers of the cylinder. The ports in the valve casings, instead of showing three openings like Plaintiff's Exhibit C, has no central port. It shows four, two on each side. These ports correspond with ports on the cylinder. The openings to the cylinder being on each alternate side of the center, the valve casing is so constructed that what becomes an induction port on one end of the cylinder is an eduction port on the opposite end.

Q. Have you one of the valve casings of the pumps now manufactured by the defendants?

A. I have.

Witness here produces an iron valve casing, which is marked Defendants' Exhibit No. 6.

Q. Since what time have the defendants made pumps in the form shown by Exhibits Nos. 5 and 6?

A. Since December, 1871.

Q. Is the combination and mode of construction of the induction and eduction passages different in Exhibits Nos. 5 and 6 from that shown in Plaintiff's Exhibits B and C?

A. Yes, sir; they are entirely different.

Q. Have you seen a gas pump manufactured by M. R. Clapp, of Hudson, N. Y.; and, if so, where did you first see it?

A. I saw a water-pump, not a gas-pump, in 1863 in the city of New York. I saw it in Mr. Clapp's shop.

Q. Describe it.

(Objected to by the plaintiff's counsel, on the ground that it is not alleged in the answer that the witness, or any other person, had knowledge of any previous invention of the device for which the plaintiff's patent was issued at New York, or that such invention was used in New York; nor is it alleged where any device claimed to be a previous
88 invention of that covered by the plaintiff's patent was known or used, or by whom it was known or used.)

A. I don't know as I can give an exact description of it, it being so long ago since I have seen it.

Q. Have you seen pumps manufactured by said Clapp at the city of Hudson since that time; and, if so, when?

A. I have not seen any pumps, only drawings of the same, I having made some models from his drawings.

Q. When were they made?

A. The models were made this last winter or spring; the drawings I have had since the commencement of this suit.

Q. Do you know when the drawings were made?

A. Only what Mr. Clapp informed me.

Q. Have you a map showing sectional views of the plaintiff's pump and the pump described by T. C. Smith in his application?

A. I have a map showing sectional views of each pump through the same place.

Witness here produces a map, which is put in evidence, and marked Defendants' Exhibit No. 10.

Q. What does Fig. 1 in the drawings of the Pollard pump represent?

A. Fig. 1 represents a side view of plaintiff's pump.

Q. What does Fig. 2 in the drawing of the Pollard pump represent?

A. It represents a front view of Pollard's pump, showing the three ports at the top of the cylinder where the valve casing is bolted on.

Q. What does Fig. 3 in the drawing of the Pollard pump represent?

A. It shows a sectional view through the chamber attached to the cylinder, showing a plan of the induction and eduction passages, and also of the central port to the cylinder.

Q. State what the remaining figures in the drawing of the Pollard pump represent in their numerical order.

A. Fig. 4 represents a sectional view through the pump just below the top valve casing.

Fig. 5 represents a sectional view through centre of cylinder on a line with induction and eduction pipes.

89 Figs. 6, 7, and 8 are sectional views through the valve casing, showing three separate plans of the same; one below the valve seat, one through the center of the valve seat, and one above the valve seat.

Fig. 9 represents a transverse view of the valve casing, showing the line of passage of the gas or other fluid through the same, as shown by the arrows.

Q. Describe what the various figures of the Smith pump on said map represent, giving them in their numerical order.

A. Fig. 1 represents a side view, the same as shown in Fig. 1, of Pollard's pump.

Fig. 2 represents a sectional view of the pump, showing the ports of the induction and eduction passages, and the central passage to the cylinder, corresponding with Fig. 3 in the Pollard pump.

Fig. 3 is a front view, showing the induction and eduction ports, corresponding with Fig. 2 in Pollard's pump.

Fig. 4 represents a plan of the pump through the lower part of the valve casing, corresponding with Fig. 8 in the Pollard pump.

Fig. 5 represents a sectional view through the valve casing and cylinder, on a line with the center of the valve casing.

Fig. 6 represents a top view of the valve casing.

Fig. 7 represents the valves of the same.

Fig. 8 represents a valve casing, showing the direction of the gas or other fluid through the same as shown by the arrows, corresponding with Fig. 9 of the Pollard pump.

Fig. 9 shows a sectional view through the center of the cylinder, on a line with the induction and eduction pipes, corresponding with Fig. 5 in the Pollard pump.

Q. Describe the invention set forth in the specification and drawings and model in the application of T. C. Smith.

A. It is a pump cylinder in combination with a chamber hav-
90 ing two separate and distinct longitudinal passages with the ports at the side for the attachment of the induction and eduction pipes; the ports at the top and bottom of the cylinder opening outwards into the valve casing; the ports in the valve casing open respectively to the side pipe and the cylinder, and provided with valve seats so arranged that the gas or other fluid may pass over one valve and under the other.

And upon his cross-examination by Mr. COGSWELL, the witness testifies:

Q. In what manner did the defendants obtain the patterns of the gas pumps first manufactured by them, as stated in your testimony?

A. The patterns were made from drawings furnished by myself.

Q. Did you or did you not make those drawings from one of the plaintiff's pumps?

A. I did not; I made the drawings from memory, having seen the plaintiff's pump.

Q. Were your drawings made to correspond with the plaintiff's pump as nearly as you could recollect it?

A. The direction of the passages to and through the valve casing are the same; the proportions and sizes and forms of the same are different.

Q. Were you sued at any time for infringing the plaintiff's patent; and, if so, when?

A. We were sued August 16th, 1871.

Q. When did you make the change you have spoken of in your evidence, in the pump manufactured by you?

A. In December, 1871.

Q. Have you the cylinder from which the valve casing Exhibit No. 6 was taken, here in this city?

A. I have.

Q. Have you read the plaintiff's specifications, and examined the drawings attached thereto?

A. I have.

Q. Will you state what you understand to be the essential feature of the plaintiff's invention?

91 A. The valve casing he says he believes to be known, and bolting that to the cylinder, making it into a double-acting pump.

Q. Have you read the specifications and examined the drawings in the application of T. C. Smith for a patent?

A. I have.

Q. What do you understand to be the essential features of his invention as disclosed in such application?

A. He claims the two separate valve boxes attached to the cylinder, making it into a double-acting pump.

Adjourned until Sept. 27th, at 10 o'clock a. m.

SEPTEMBER 27TH, 1873—10 o'clock a. m.

Present, the counsel for the respective parties.

And the witness George Cowing, being further examined by Mr. LAPHAM, for the defendants, testifies:

The witness produces the model filed by T. C. Smith in the Patent Office, April 25th, 1865, which is received and marked Defendant's Exhibit No. 7, and is asked:

Q. Does Exhibit No. 4 show correctly the induction and eduction passages, and the course of the gas or other fluid in its passage through the pump as shown in the model, Exhibit No. 7?

A. It does.

Q. Does it make any difference, except one of mechanical construction merely, whether the whole valve box is attached by screws or bolts, as in Plaintiff's Exhibit B, or by a horizontal cap attached by screws, as contained in Defendants' Exhibit No. 7?

(Objected to by plaintiff's counsel as leading, and suggestive of the answer.)

A. It makes no difference.

Q. State whether the valve box in Plaintiff's Exhibit B constitutes any part of the invention claimed by Pollard.

(Objected to by the plaintiff's counsel as calling upon the witness to give a construction to the patent.)

92 A. It does.

Q. What?

A. The valve casings when attached to the pump are exactly alike, allowing the passage of the gas or the fluid through the induction ports and valves into the cylinder, and its exit through the eduction valve to the eduction passage, substantially the same as in the Pollard pump, the difference being merely in the mechanical detail of its construction.

Q Of which pump are you speaking in your last answer?

A. Of T. C. Smith's.

Q. State whether the valve box itself is claimed by the plaintiff as constituting any part of the invention of Pollard.

(Objected to by plaintiff's counsel, on the ground last above stated.)

A. It is.

Q. What?

A. I can best illustrate that with an exhibit.

The witness here produces an exhibit, marked by me Defendants' Exhibit No. 8, and says:

No. 8 is a valve casing, such as is used on single or double-acting pumps by simply bolting on, illustrating the manner of attaching the valve casing to the Pollard pump.

The witness here produces another exhibit, marked by me, Defendants' Exhibit No. 9, and says:

It is a valve casing, same as Exhibit No. 8, and instead of being bolted to the pump, is all cast to the cylinder, illustrating the manner of the same valve casing attached to the Smith pump; each valve casing, Nos. 8 and 9, are each substantially one and the same.

Q. State whether you manufactured gas pumps prior to 1871; and, if so, describe the mode of construction.

(Objected to by the plaintiff's counsel, on the ground that it is not alleged in the answer that the witness had knowledge of any previous invention of the device for which the plaintiff's patent was issued,

93 nor is it alleged when or where any device claimed to be a previous invention of that covered by the plaintiff's patent was known or used, or by whom.)

A. We did; we had a pump cylinder constructed with a chamber all cast to the cylinder, with eduction port in the center of the passage, with ports at each end of cylinder opening outwards into a valve casing; the face of a chamber on each end of the cylinder being planed off true, and a valve casing being bolted on so that the gas may pass through the valve casing to the cylinder. The induction passage being taken through the cylinder heads, the eduction passages pass through the valve casings similar to Plaintiff's Exhibit B, the valve casings being of a different construction from plaintiff's, but forming only one joint at each end of the cylinder, to prevent the leakage of gas. These were made in 1864.

Q. State whether the defendants at any time manufactured pumps with valve casings, as shown in Exhibits Nos. 8 and 9; and, if so, when.

A. We manufactured them for near twenty years.

And the cross-examination of the witness George Cowing being resumed by Mr. COGSWELL, the witness testifies:

Q. When did you manufacture the last gas pumps made according to the description of those which you said were manufactured in 1864?

A. In the spring or summer of 1865.

Q Are the valve casings of the pumps now manufactured by the defendants, and which have been manufactured by them since December, 1871, cast separate from the cylinder?

A. They are.

Q. What has to be done to the valve casings after they are cast, to fit them for use?

A. They are planed off, and bolted on substantially as the pumps we made in 1864.

(The counsel for the plaintiff objects to the last part of the answer, as not responsive to the question.

94 The counsel for the defendants insists that it shall remain.)

Q. What part of the valve casing is planed off?

A. The face containing the ports.

Q. Is that all that has to be done to the valve casing to fit it for use?

A. No, sir.

Q. What further has to be done?

A. They are fitted the same as the ordinary check valves that are sold in the market.

Q. By fitting, do you mean that the valve seat is turned down true, so as to form with the valve as perfect a joint as possible, and that the thread is cut to receive the screw of the valve cap, and that the seat of the valve cap is turned to form as perfect a joint as possible at that point?

A. I do.

Q. Is that done by bolting or securing the valve casing to the face plate of an iron turning lathe, and then turning it while revolving in the lathe?

A. It is, being the usual way of doing all such work.

Q. What, if anything, is necessary to be done to the cylinder of the pump to prepare it to receive the valve casing?

A. They are planed substantially the same as those made in 1864.

Q. About what is the length of the pump cylinder as manufactured by the defendants?

A. We make two sizes, about eighteen inches and twenty-four inches long, each.

Q. For what size is the valve casing Exhibit No. 6 made?

A. It is made for either size.

Q. Is No. 6 a valve casing for the upper or lower end of the pump?

A. It will answer, being so constructed, that each end of the valve casing can be used for either an induction or eduction port, showing that its special construction is different from the Plaintiff's Exhibit C. And it will answer for either end.

95 (The counsel for the plaintiff objects to all of the witness' answer, except the words "it will answer for either end," as not responsive to the question. Evidence received subject to objection.

The counsel for the defendants insists that it is proper, as part of the answer explanatory of the construction of Exhibit No. 6.)

Q. In your testimony yesterday you said, speaking of the pump that the defendants have manufactured since December, 1871, that the ports in the valve casings show four openings, that these ports correspond with ports on the cylinder; is that true?

A. I testified so, not knowing how to get it in a better shape so that it would be understood. If one port of the valve casing should be closed up, it could not be used for the opposite end of the cylinder. The blind port on one end of the cylinder becomes an exhaust port on the opposite end, showing that each port in the valve casings has its proper use on the pump cylinder.

Q. How many ports are there on each end of the cylinder?

A. Three.

Q. When the valve casing is in its place upon the cylinder, is one port of the valve casing closed by the plane surface of the cylinder?

A. It is.

Q. Then how many ports in each valve casing are in use when the valve casing is bolted to the cylinder, and the pump is in use?

A. Three.

Q. Is there any difference in the gas or other fluid passing through the pump produced by the direction in which it travels?

A. The gas is the same, no matter what pump it passes through.

Q. Does it make any difference in the gas in what direction it passes through?

A. The gas is the same, no matter in what direction it passes through.

96 Q. Are the valve casings in the device described in T. C. Smith's application for a patent, and illustrated in the model, Exhibit No. 7, cast upon the cylinder?

A. They are.

Q. Is the pump cylinder now shown you, one of the pumps, and like the pumps which the defendants have manufactured since December, 1871?

A. It is.

Plaintiff's counsel produces the pump in evidence, which is by the examiner received and marked "Plaintiff's Exhibit F."

Q. Is it the pump from which Exhibit No. 6 was removed?

A. It is.

Q. How many valves were there in each valve casing in the pump manufactured by you in 1864?

A. One.

Q. Where did the gas enter into the cylinder?

A. Through the cylinder heads.

Q. Were the valves in the valve casings of that pump eduction valves only?

A. They were.

Q. Was there more than one valve casing attached to the cylinder?

A. There was a valve casing bolted upon each end of the cylinder.

Q. Was the passage from one valve casing to the other an eduction passage merely?

A. It was.

Q. What is the weight of the pump cylinder manufactured by the defendants since December, 1871, with the valve casings attached?

A. I do not know the exact weight; the whole pump when finished weighs about seven hundred pounds.

Q. If the valve casings were cast upon the cylinder, would it be practicable to turn the valve seat and cut the thread in the screw to receive the valve cap in a turning lathe?

A. It would not.

97 Q. How many pumps of the kind manufactured by the defendants since December, 1871, have they made?

A. I could not tell without looking at the books.

Q. Can you approximate to the number?

A. I cannot, having never kept any account since we made this Exhibit F.

Q. If the valve casings were cast upon the cylinder of the pumps made by the defendants, would it be practicable to turn the valve seat and cut the thread in the screw to receive the valve cap in any way?

A. It would, provided you had special machinery for doing the same.

Q. Do you know of any machinery now in use or existence by which the same could be done?

A. If the demand was large enough for them, I could build the machinery suitable for it.

Q. Do you know of any machinery now in use or existence by which the same could be done?

A. I do not.

Q. How long have you been a manufacturer of pumps?

A. I have made pumps since the 4th day of March, 1849, but a manufacturer since 1859.

Q. Are you a practical machinist? And, if so, how long have you been?

A. I worked at a trade most eleven years. I had the supervision of the same since 1859.

Q. Do you manufacture pumps exclusively, or do you also manufacture other articles?

A. We manufacture all kinds of pumps; also our own special machinery; also steam pumps.

And upon his redirect examination by Mr. LAPHAM, the witness testifies:

Q. If you cut off the valve-box in Exhibit No. 7, so as to present a sectional view, state whether the ports exhibited would be the same as in Plaintiff's Exhibit C.

A. They would show exactly the same.

Q. Is a valve-box separate from the cylinder to which it is to be attached a new or an old and well understood mechanical device in common use by pump makers?

98 A. It is an old and well established device, and understood by all pump makers.

Q. Are the valves and valve caps, as shown in Exhibit C, a new or an old and well understood mechanical device, and in common use among pump makers?

A. They are an old mechanical device which we have made for twenty years.

Q. Is Exhibit C a valve cap for the top or bottom of the cylinder?

A. It would answer for either end; but would not be suitable for a right or left hand induction or eduction passage.

Q. Would Exhibit No. 6 answer for either passage?

A. It would.

And being recross-examined by Mr. COGSWELL, the witness testifies:

Q. Do you find in the device described in T. C. Smith's application for a patent, and illustrated in Exhibit No. 7, a chamber extending from the top to the bottom of the cylinder, divided longitudinally by a partition?

A. I do, with this difference: The center of the cylinder in Smith's pump is moved forward just half its diameter towards the valve facings, forming a partition just the diameter of the cylinder, dividing the chamber into two longitudinal passages.

Q. Is the pump, Exhibit F, with the valve casing, Exhibit No. 6, adapted to a right hand or left hand induction interchangably, without any change or modification?

A. There would be no modification of the valve casings, but there would be of the pump cylinder.

Q. For which is the cylinder and casing adapted as they now are?

A. With the chamber facing you, the left hand side is the induction side.

GEORGE COWING.

99 EDMUND BURROUGHS, being sworn in behalf of the defendants, on his direct examination by Mr. LAPHAM testifies as follows:

Q. State your name, age, residence, and occupation.

A. Edmund Burroughs; age, 48; residence, Auburn, N. Y., and by occupation a machinist.

Q. How long have you been a machinist?

A. About 32 years.

Q. Are you acquainted with the plaintiff's invention as shown in the model Exhibit B?

I see it before me; that is all the acquaintance I have with it, except that I have seen it before in Mr. Cowings possession—the drawings, &c.

Q Have you seen the drawings and specifications connected with the plaintiff's patent?

A. I have.

Q. What, as you understand it, constitutes the invention claimed by the plaintiff?

A. He claims from his specifications, as I understand it, the connection between the valve casings and side pipe, I think it is.

Q. Have you also seen the petition and specification and model in the application of T. C. Smith, as shown in Exhibits Nos. 2 and 7?

A. I have.

Q. Are you familiar with the nature of the invention claimed by said Smith?

A. I think I understand it.

Q. State whether the two inventions, the one claimed by the plaintiff and the one claimed by said Smith, are substantially alike or substantially different.

(Objected to on the ground that it does not call for the expression of an opinion of the witness upon any mechanical subject.

2d. That it requires him to construe the specification of both Smith and the plaintiff.

3d. It is not a subject upon which an opinion can be asked.

The evidence is received subject to the objection.)

100 A. I don't know how you would qualify substantially, but I should think they were in principle about the same thing.

Q. Could a mechanic, using the specification of Pollard alone without the drawings, construct a pump after the model Exhibit B?

(Objected to by plaintiff's counsel on the ground—

1st. It is immaterial.

2d. There is no defence of uncertainty in the specifications set up in the answer.

Received subject to the objection.)

A. I could construct it. I should think a first-class mechanic could construct one.

And being cross examined by Mr. COGSWELL, the witness testified:

Q. Is not the making of the valve casings separate from the cylinder in the pump, illustrated by Exhibit B an essential feature of the device?

A. I should say it was not essential to this kind of a pump.

Q. If a pump cylinder like Exhibit F had the valve casings cast upon it, could the valve seat in the casings for the valve and valve cap and the thread of the screw be turned by any tool that you know of?

A. Certainly they could.

Q. With what tool, if a pump cylinder like Exhibit F had valve casings cast upon at its upper and lower ends, could you turn the valve seat in the casing?

A. By a tool illustrated on page 232, in a publication entitled "Engineering," published Friday, September 13th, 1867. I would say that I have used tools called special boring tools. Where there is not room enough to turn them by a crank or machinery, we attach what is called a ratchet to turn the boring tool.

Q. Could the tool you have last described be used except by hand?

A. It can.

The counsel for plaintiff shows witness the tool to which he has referred.

101 Q. Could that tool be used to turn the valve seat in the valve casing on the lower end of the cylinder except by boring through the upper valve casing?

A. I should hardly think that one could.

Q. In what way would you operate the ratchet of which you spoke?

A. In the same way in which we use a ratchet-drill, substituting a reamer or suitable tool in the place of the drill.

Q. Do you know of any such tool in use?

A. I do.

Q. Where can you find a tool with which that can be done?

A. You can find them in shops where they cut out for boiler flues.

Q. Could a pump be manufactured as cheaply with the cylinder, like Exhibit F, with valve casings, like Exhibit 6, cast solid upon it, as one constructed according to the Model Exhibit B?

A. It could be done cheaper to cast them solid and finish them on it.

E. BURROUGHS.

Adjourned until 29th, at 10 o'clock a. m.

September 29th, 1873, the parties appeared, Mr. Lapham, counsel for the defendant, not being able to be present, by consent of parties adjourned until Monday, October 6, at 10 o'clock a. m.; time to finish taking testimony extended to and including October 8th. This without prejudice to the right of either party to bring the cause to a hearing at the next term of this court.

OCTOBER 6TH, 1873—10 o'clock a. m.

Proceedings held open until 2 o'clock p. m.

OCTOBER 6TH, 1873—2 o'clock p. m.

Present, Mr. J. B. PERKINS, of counsel for the plaintiff, and Mr. E. G. LAPHAM, of counsel for the defendants.

102 LEONARD EGGLESTON, being called by the defendants, and being duly sworn, testifies as follows:

Q. State your name, age, residence, and occupation.

A. My name is Leonard Eggleston, my residence is Seneca Falls, occupation a pattern-maker, my age is fifty-one.

Q. How long have you worked at the business of pattern-making?

A. Over twenty years.

Q. State what knowledge you have, if any, of the subject of inventions.

A. I have got out some inventions. I have obtained some two or three patents.

Q. Do you know of the gas pump and valve-box now manufactured

by the defendants, as shown by the Defendants' Exhibit No. 6, and the Plaintiff's Exhibit F?

A. I know them.

Q. When did you first know, and how, of pumps made in that form of induction and eduction passages?

(Objected to by plaintiff's counsel on the ground that it is not alleged in the answer that the witness had knowledge of any previous invention of the device for which the plaintiff's patent was issued, nor is it alleged when or where any device claimed to be a previous invention of that covered by the plaintiff's patent was known or used, or by whom.)

A. It was in December, 1869; Mr. Rumsey's folks wanted me to get up a gas pump, or something of that kind, and I made this.

The witness here produces a valve casing, which is received and marked Defendants' Exhibit No. 11.

I got the patterns out in the month of December, can't tell exactly as to the time. I got the patterns so that they got them into the sand about the holidays—Christmas.

Q. At what time did you adopt the plan and commence making the patterns?

A. It was in December; I can't tell the time exactly; it was some time along in the fore part of the month probably.

103 Q. State whether you informed the defendants of this mode of manufacturing the pump, and, if so, when?

A. I think that some time after the suit was commenced I showed Mr. Cowing my device.

Q. Have you seen pumps made after the patent of the plaintiff as shown in Exhibit B?

A. I have seen them just as it stands there now; never saw them apart.

Q. State the difference, if any, between pumps made after your invention and that of the plaintiff.

A. The difference, as far as I can see, is a difference in the ports.

Q. What are the advantages, if any, of having the ports constructed as in the model furnished by you. Exhibit No. 11?

A. I don't see any difference with the exception of taking the gas directly under the valve and discharging it directly on top.

Q. In the practical working of the pump is there any advantage gained by having the gas pass in that manner?

A. I can't say as I can; I don't know that I see any particular advantage.

Q. State whether the ports as made in Exhibit 11 will admit of a larger and more free flow of gas than in Exhibit B.

(Objected to by plaintiff's counsel as leading, and received subject to the objection.)

A. It has the appearance of having a freer flow.

And being cross-examined by Mr. PERKINS, the witness testifies:

Q. Did you ever obtain letters patent, or apply for letters patent, for the device shown in Exhibit No. 11?

A. I have not.

Q. Where did you get the idea of the arrangement of valves and ports shown in Exhibit No. 11?

A. Mr. Pryce W. Bailey, of Seneca Falls, drew a kind of a rough
104 sketch with a pencil; it was different from Exhibit No. 11, and I did not like it, so I designed this. I would state in addition that Mr. Bailey had been up in the oil regions.

Q. Did Rumsey & Co. abandon the manufacture of pumps made in accordance with the patterns made by you—Exhibit No. 11?

A. They have.
Q. Do you know why?
A. I can't say that I do.

And being re examined by Mr. LAPHAM, the witness testifies:

Q. Have you compared the model filed by T. C. Smith, Exhibit No. 7, with Plaintiff's Model Exhibit B; if so, state whether there is any difference in the induction and eduction passages; if so, state such difference?

(Objected to by plaintiff's counsel on the ground that it is not alleged in the answer that the witness had knowledge of any previous invention of the device for which the plaintiff's patent was issued, nor is it alleged when or where any device claimed to be a previous invention of that covered by the plaintiff's patent was known or used, or by whom.)

Q. I have only examined it as I have sat here. I should have to state my opinion on this thing. My opinion is that the operation of the gas is nearly the same.

Q. Are valve casings separate from the pump to which they are attached a new or an old and well-understood device among pump-makers?

(Objected to by plaintiff's counsel and received subject to the objection.)

A. There are globe valves or casings that bolt on to the sides or on the flange, the same as this. (Referring to Exhibit No. 7.) The globe valves are not new.

Q. Would it require any more than the skill of an ordinary mechanic to make the valve casings in the model of T. C. Smith, separate from the cylinder entire, instead of being part cast upon the cylinder as in Exhibit No. 7?

105 A. I shall have to give my opinion merely. It is my opinion that they could be cast separate.

Question re-read by the examiner.

A. This valve box, by cutting it from the cylinder, is made so as to be bolted back on again and be the same as it is now.

Question repeated.

A. In my opinion it would not require more than ordinary skill to cut it off.

Q. State whether with the valve casing cut off in Exhibit No. 7 the same ports are exhibited as in Exhibit B, with the valve casing off.

A. It is my opinion that it does. It shows three ports.

And being recross-examined by Mr. PERKINS, the witness testifies:

Q. Do you see any substantial distinction between the arrangement of valves and ports in Exhibit No. 7 and in Exhibit No. 11?

A. I can't say that I do in the practical operation.

L. EGLESTON.

The witness, GEORGE COWING, being recalled in behalf of the defendants, testifies as follows:

Q. When were the defendants first informed by the last witness, Eggleston, of his device for pumps, as shown in Exhibit No. 11?

A. In the fall of 1871.

Q. What advantages, if any, has that mode of constructing the pump over that shown in Plaintiff's Exhibit B?

A. It admits of a larger area of port, and also a more direct flow of gas, preventing the same from what is termed wire drawing, saving a heating of the pump.

Q. State the relative capacity of the two in a pump of the same size.

A. In our first pump the area of the ports through the valve casing was two inches; in our present one it is four and five-eighths inches.

106 The induction pipe in each pump has an area of three inches and fourteen one hundredths. I mean the induction pipe that connects with the pump. By the first pump I mean the one represented in Exhibits D and E.

Q. Can the larger capacity be attained in the form of the plaintiff's patent, and what are the advantages, if any, in such larger capacity?

A. In equal sizes it cannot. It admits of a free escape of the gas and prevents the heating of the pump.

And being cross-examined by Mr. PERKINS, the witness testifies:

Q. Would the passage of the gas be more direct at both ends of the cylinder in Exhibits F and 6 than in Exhibit B?

A. It would as shown in Exhibit No. 5, which is defendants' present pump, compared with Defendants' Exhibit No. 3, which shows the direction in Plaintiff's Exhibit B.

GEORGE COWING.

Adjourned until October 7th, at 10 o'clock a. m.

OCTOBER 7TH, 1873—10 o'clock a. m.

Present, the counsel for the respective parties.

Proceedings held open until 2 o'clock, p. m.

OCT. 7TH, 1873—2 o'clock p. m.

Proceedings adjourned until Nov. 22, 1873, by stipulation of the solicitors for the respective parties.

NOVEMBER 22D, 1873—10 o'clock a. m.

Present, the counsel for the respective parties.

MIRTILLOW R. CLAPP, being called and sworn for the defendants, testified as follows on his direct examination by Mr. LAPHAM:

Q. Where do you reside; what is your age and occupation?

107 A. I reside at Hudson; age, 44; am superintendent of the Clapp & Jones Manufacturing Company.

Q. What is the business of that company?

A. Steam fire engines and water-works machinery.

Q. How long have you been engaged in that or similar business, and have you given any attention to the subject of patents or inventions, and of double action pumps and va'ves boxes?

A. Yes, sir; considerable attention, and have been studying that for the past 18 years; I have been engaged in that business about 8 years.

Q. State whether at any time you or your firm became the purchaser of a patent for a valve box, and, if so, how long since.

A. We never purchased a patent.

Q I mean a pattern or model instead of a patent.

A. We bought a lot of patterns in '65 or '66. I couldn't give the exact time. There were a good many valve boxes among the lot.

Witness is here shown model which is put in evidence, and is by me marked Defendants' Exhibit No. 12, and is asked:

Q. State whether among them was a model or pattern of a valve box like those contained in this exhibit.

(Objected to by complainant's counsel on the ground that it is not alleged in the answer that the witness had knowledge of any previous invention of the device for which the plaintiff's patent was issued; nor is

it alleged when or where any device claimed to be a previous invention of that covered by the plaintiff's patent was known, or was used, or by whom.

The evidence is received subject to the objection.)

A. The same, except one change in the partitions inside.

Q State what that change was, and if you have a model showing it, produce it as an exhibit.

(Objected to by complainant's counsel on the grounds last stated.

The evidence received subject to the objection.)

108 A. Witness, in answer, produces model, and says the curved partition in the eduction part of the valve chamber to make a passage way to the bottom of the box.

Q. State in what shape that partition was when you purchased the pattern or model.

(Objected to by complainant's counsel as before.

Evidence received subject to objection.)

A. Continued straight across, from A to A, as shown in this.

The model is offered in evidence, and is by me marked Defendants' Exhibit No. 13.

(Objected to on the ground last stated.

Received subject to the objection.)

Q. State when you made the curved web or partition described by you, and for what purpose it was done.

(Objected to on the ground last before stated, and as specifying no place where, and as assuming a fact not shown.

Evidence received subject to the objection.

The question is waived by defendants' counsel.)

Q. State when and by whom that change was designed, and if by you, for what purpose it was done.

(Objected to on all the grounds last before stated.

Evidence is received subject to the objection.)

A. The change was designed and made by myself; the object in making it was that only one joint would have to be broken in case repairs were necessary. It was, I think, in the year '66; I couldn't give those dates exact.

Q. State whether you had any other object than the one named by you in making the change.

A. The only other object was to make it convenient to attach to a pump of any other form.

Q. With that change, state whether it can be attached and used with a horizontal as well as a vertical pump.

(Objected to by complainant's counsel as immaterial.

Evidence received subject to the objection.)

A. Yes, sir.

109 Q. Without the change to which form of pump is it applicable, it either?

A. To the vertical.

Q. Could it be used with the horizontal without such change?

A. Not without changing the shape of the pump.

Q. When you designed this change in the web or partit on, as described by you, did you make a drawing exhibiting the same; if so, produce it as an exhibit?

(Objected to on the ground that it is immaterial; and, also, on the grounds specifically above stated.

Evidence received subject to the objection.)

A. I did make a drawing, and this is the drawing made.

Witness produced a paper, which is offered in evidence, and is by me marked Defendants' Exhibit No. 14.

The drawing is received subject to the same objection made to the question.

Q. Are valve-boxes separate from the pumps to which they are attached a new or an old and well-known device in mechanics?

A. It is very old. I don't know how old, but it is old.

Q. Have you seen and examined a pump or model of the plaintiff's invention, as shown in Exhibit B?

A. I don't know that I have seen that apart. I have seen this one, or one similar to it.

Q. Do you now understand, after looking at Exhibit B, its mode of construction and action?

A. Yes, sir.

Q. State whether such construction and mode of action is substantially the same or substantially different from that shown in Exhibit No. 12, produced by you.

(Objected to on the grounds stated as grounds of objection to the sixth question propounded to this witness; and, also, that it does not appear that he ever constructed a pump or knew of one constructed like Exhibit No. 12.

110 Evidence received subject to the objection.)

A. It is substantially the same.

Q. Have you seen and examined the model of T. C. Smith, Exhibit No. 7, and do you understand its construction and mode of operation?

A. I have seen the model, and understand its construction and operation.

Q. Is that substantially the same or substantially different from that shown in Plaintiff's Exhibit B?

A. In its operation it is the same.

Complainant's counsel desires that the witness should answer the remaining part of the question.

A. It is very different in construction, or a wide difference in construction.

Q. State whether that difference is anything more than a difference in mechanical construction or form.

(Objected to as leading.

Received subject to the objection.)

A. That is all.

Q. State whether you find in Exhibit No. 7 the same combination of valve-box and valves, and of the induction and eduction passages with the pump, as is found in Exhibit B.

A. Yes, sir; just the same, except in form.

Q. Have you seen the pump manufactured by the defendants, as shown in Exhibit No. 6 of defendants, and Plaintiff's Exhibit F, or the valve-box attached thereto?

A. I have seen the valve-box, but I couldn't say that it was ever attached. I have seen the valve-box Exhibit No. 6.

Q. State whether the valve-box, model of which you have produced, as purchased by you in '65 or '66, with the change you made in the web or partition of the same, can be applied to the same pump as Exhibit No. 6.

(Objected to on the ground that it is immaterial, and that it does not appear that he ever made any change in the web or partition, nor anything except a drawing.)

111 A. It can be applied by making the size to correspond.

Witness here produces a model, showing how such application can be made, which is put in evidence and is marked Defendants' Exhibit No. 15, and is asked:

Q. State whether there is any difference between Exhibit No. 6 and No. 15, except in mechanical construction.

(Objected to as leading.

Received subject to the objection.)

A. The only difference is in shape, or in mechanical construction.

Q. State whether the mode in which a valve-box may be attached to a pump requires any invention or involves anything more than mechanical skill.

(Objected to as calling for an opinion of the witness on a matter. Question waived by defendants' counsel.)

Q. State the usual mode of attaching valve-boxes to pumps.

A. By bolts usually; sometimes being cast on, sometimes by clamps.

On his cross examination by Mr. COGSWELL, the witness testified:

Q. Can you tell by whom Model Exhibit No. 12 was constructed?

A. I cannot.

Q. Was it or any part of it constructed by you?

A. It was not.

MIRTILLOW R. CLAPP.

The witness, GEORGE COWING, being recalled by defendants' counsel, is asked:

Q. State whether you prepared Exhibit No. 12; and, if so, what you used to guide you in making the same.

A. I made the model from drawings furnished me by Mr. Clapp. The drawings shown in Defendants' Exhibit No. 14.

GEORGE COWING.

Adjourned until November 29, 1873, at 10 o'clock a. m., to proceed with the complainant's evidence.

112 NOVEMBER 29TH, 1873—10 o'clock a. m.

Present, the respective parties and counsel for the complainant.

WILLIAM H. POLLARD, recalled for the plaintiff, upon his direct examination by Mr. COGSWELL, testified as follows:

Q. Have you seen the Model Exhibit 7 in this case, and the specifications attached to the application of T. C. Smith for a patent, Defendants' Exhibit No. 2?

A. I have.

Q. When did you first see that model and application, and where?

A. I first saw the application in a copy which was sent us from the Patent Office after a rejection of our application for a patent upon the pump shown by Plaintiff's Exhibit B.

Q. When did you next see it?

A. At the Patent Office at Washington, immediately before the granting of our patent.

Q. Did you then see the application and the model, or only one; and, if only one, which?

A. I saw the application, and think I saw the model, but may be mistaken in regard to having seen the model.

Q. State whether the application of Smith and the model, or either,

and which of them, were before the examiner at the time the application for the plaintiff's patent was under consideration?

A. The application was certainly before the examiner. The model, I believe, was also there.

Q. Look at Plaintiff's Exhibit B and Defendants' Exhibit No. 7, and state whether, in your opinion, the devices illustrated by those models are substantially the same, or substantially different.

A. In my opinion they are substantially different.

Q. State in what that difference consists.

A. The pump illustrated by Plaintiff's Exhibit B consists of a cylinder with the necessary plunger, upon one side of which cylinder
113 is cast a single pipe divided by a longitudinal partition into two separate and distinct passages, having no connection with each other or with the cylinder. These passages extend nearly the whole length of the cylinder, and open outward at each end. Between these openings at each end is another passage, having no connection with the other two, but communicating with the interior of the cylinder. Two valve casings are made, each one a duplicate of the other, having openings upon one side, which in relative position and size exactly coincide with the openings already described from side pipes and cylinder. From one of these openings leads a passage to the under side of one valve; from the opposite opening leads a passage to the top of the other valve. The central passage communicates with the top of one valve and the bottom of the other. Such is a general description of Plaintiff's Exhibit B.

Defendants' Exhibit No. 7 represents a pump having two separate and distinct side pipes, situated at diametrically opposite sides of the cylinder. The valve boxes are cast upon the cylinder, and communicate at their extremities with the side pipes, the evident intention being to make a pump in which the valve boxes and cylinder may be cast all in one piece.

Q. State whether in the device illustrated by Plaintiff's Exhibit B the making of the valve casings separate from the cylinder is or is not an essential feature.

A. It is.

Q. State whether in the device illustrated by Defendants' Exhibit 7 the casting of the valve casings upon and as part of the cylinder is or is not an essential feature.

A. It is.

Q. How long have you been engaged in the business of manufacturing and selling pumps?

A. I have been engaged about seven years as superintendent for the plaintiff. Generally I have been engaged as a machinist a great many years, dating from April, 1852, during which time I have built pumps most of the time.

114 Q. State whether you have been largely acquainted with the different varieties of pumps in the market.

A. I have been.

Q. Did you ever see or have you ever known or heard of a pump constructed upon the plan or according to model Defendants' Exhibit No. 7?

A. I have never seen, known, or heard of such a one.

Q. State whether in your opinion two separate side pipes and the valve casings cast upon the cylinder in Defendants' Exhibit 7, and the single pipe divided into separate passages by a longitudinal partition

in connection with the valve casings cast separate from the cylinder, are mechanical equivalents each for the other or not.

A. In my opinion they are not.

Q. State whether it would be practicable to construct a pump according to Plaintiff's Exhibit B if the valve casings were cast solid upon the cylinder.

A. It would be possible, but not practicable.

Q. Why not?

A. Because it could not be done without special tools and machinery designed for that express purpose. The reason why not is that the valve casing at the top of the pump covers in a vertical line the valve casing at the bottom entirely, thereby precluding the use of any ordinary machinery for boring, facing valve seat, and cutting thread in the lower casing, all of which must be done with perfect accuracy to insure a perfect working pump.

Q. What tools and machinery are necessary for the construction of a pump according to Plaintiff's Exhibit B?

A. No tools other than such as are to be found in every ordinary machine-shop. A planing machine, a drill press, and an engine lathe, with such tools as are ordinarily in use in connection therewith.

Q. Are the special tools and machinery which you say it would be necessary to have to construct a pump like Exhibit B, with the valve
115 casings cast upon the cylinder, in use, or would they have to be specially constructed for that purpose?

A. They would have to be specially constructed.

Q. Are such tools and machinery in existence so far as you know?

A. They are not.

Q. Would the construction of such tools and machinery be expensive or otherwise?

A. It would be expensive.

And on his cross-examination by Mr. H. C. HUTCHINSON, the witness testified as follows:

Q. Referring to Defendants' Exhibit No. 7, if the two lateral chambers standing as described diametrically opposite to each other should be placed at an angle bringing them nearer together, would it necessarily alter the essential character of the pump or of its construction, and would or would not the operation of the pump be the same?

A. It would necessarily alter the construction of the pump; with the necessary alterations the operation would be similar.

Q. In the same pump, when in operation, would the course of the fluid through it, when going into and coming out of the cylinder, be over one valve and under the other?

A. The pressure or vacuum caused by the motion of the plunger would take effect upon the top of one valve and the bottom of the other.

Q. Are or are not the movements of the fluids through the valves similar in each of Plaintiff's Exhibit B and Defendants' Exhibit No. 7?

A. They are.

Q. Will you make exhibits of wire, showing the figure of movement or flow of the fluid into and through the pumps illustrated by Plaintiff's Exhibit B and Defendants' Exhibit No. 7?

A. I will, if so ordered by the court.

Q. Does or does not Defendants' Exhibit No. 3 represent the
116 figure of movement or flow of the fluid into and through the pump of plaintiff, as illustrated by Exhibit B?

A. It probably does, as well as a wire model can be made to show it.

Q. Does or does not Defendants' Exhibit No. 4 represent the figure

of movement or flow of the fluid into and through the pump illustrated by Defendants' Exhibit No. 7 ?

A. Generally it does, being somewhat deficient in proportion.

Q. Has or has not the pump illustrated by Defendants' Exhibit No. 7 corresponding parts with that of plaintiff, as illustrated by Plaintiff's Exhibit B ?

A. It has parts which perform the same functions, differently constructed.

Q. When these pumps represented by the exhibits last named are in operation, does or does not the fluid enter and pass through the corresponding parts of each in the same order and in the same relative directions ?

A. The fluid passes into and through the corresponding parts of each in the same order, in different directions, as compelled by the different construction of the two pumps.

Q. Is or is not the abstract idea of the figure of movement of the fluid into and through these two pumps, represented by the exhibits last named, the same in both ?

A. The abstract idea is the same; just as the abstract force which governs the working of all pumps (the force of gravity) is the same.

Q. Is or is not the operation of these two pumps effectively the same?

A. The operation of the two pumps is similar.

Q. How can one double-acting pump differ from another except in the figure of the flow or movement of the fluid through the pump ?

A. It may differ and be entirely different in its mechanical construction or in its adaptation to the purposes for which it is intended.

117 Q. Does or does not the special construction of any double-acting pump depend upon, and mean to all intents and purposes, the idea of the figure of movement ?

A. The figure of movement of the fluid passing into and out of the cylinders of a number of double-acting pumps must of necessity bear a family relation to one another. The special mode of construction may be very different.

Proceedings adjourned until 2 o'clock p. m. of th is day.

NOVEMBER 29TH, 1873—2 o' lock P. M.

Present, the respective parties and counsel for the complainant.

Cross-examination of witness HOLLARD resumed by Mr. HUTCHINSON

Q. Can or cannot two double-acting pumps have very different forms, and yet have the same figure of movement ?

A. They can have very similar movement.

Q. Can or cannot two double-acting pumps have the same shape or form, and yet have different figures of movement ?

A. They can.

Q. Can or can they not have different proportions of the several parts, and yet have the same figure of movement ?

A. They can.

Q. In your opinion, can or cannot the special construction of a double-acting pump change or alter the nature of the invention, except by changing or altering the figure of movement ?

A. It can.

Q. How can it so change or alter the nature of the invention ?

A. A mechanical invention consists in the providing of new means, or improved appliances to accomplish some given object; therefore, a change of construction, or even of form, may be an invention.

118 Q. Have you ever seen a gas-pump made or designed by A. P. Osborne, of Erie, Pa.; if so, when and where?

A. I have seen a pump said to have been designed by Osborne, first in Pennsylvania, some three or four years since.

Q. Did you not see one of said Osborne's pumps before you designed yours?

A. I did.

Q. Was or was not a chamber cast on the cylinder of said pump, with a longitudinal partition running through the middle, and with valve casings bolted on?

(Objected to by complainant's counsel on the ground that it is not a cross-examination of the witness, and that the defendants' time for the taking of evidence has expired under the stipulation between the parties; and for the reasons stated in the objection to the 6th question put to the witness M. R. Clapp.

Evidence received by me, subject to the objection.)

A. There was not.

And being re-examined by Mr. COGSWELL, the witness testifies:

Q. When was it that you made the invention of the pump shown by Plaintiff's Exhibit B, with reference to the time of filing the application for a patent?

A. It was probably some three or four months previous to the application.

WM. H. POLLARD.

BIRDSALL HOLLEY, being called by the plaintiff, and having been by me duly sworn, on his direct examination by Mr. COGSWELL testifies as follows:

Q. What is your age, residence, and occupation?

A. My age is fifty-three; residence Lockport, N. Y. I am mechanical superintendent for the Holley Manufacturing Company.

Q. Of what do the manufactures of that company consist?

A. The principal manufacture at present is pumping machinery
119 for supplying cities and villages with water. They also manufacture all kinds of air-pumps and gas-pumps.

Q. Are you a practical mechanic, and, if so, how long have you been?

A. I am a practical mechanic. I have been so for thirty-five years.

Q. Have you given special attention to the subject of pumps and pumping mechinery, and, if so, for how long?

A. About thirty years.

Q. Have you examined Plaintiff's Model Exhibit B, and are you acquainted with pumps constructed according to that model?

A. I have examined the pumps.

Q. Have you examined the model?

A. Yes, sir.

Q. Have you examined the Defendants' Model Exhibit No. 7?

A. I have.

The counsel for the plaintiff, the Models Exhibits B and No. 7 being now before the witness, asks:

Q. State whether, in your opinion, the devices illustrated by those models are substantially the same, or substantially different.

A. I think they are substantially different.

Q. State in what that difference consists.

A. I consider the essential part of this Model Exhibit B to be in the valve boxes being cast in a separate piece, so constructed as to admit

of the valves and form the valve seats and the necessary ports to receive and discharge the gas; also, constructed with openings on their upper surface for the convenience of fitting up. By being cast in a separate piece the mechanic is enabled to chuck them on an ordinary lathe for the purpose of fitting the valve seats, and for the purpose of repairing and facing the same when the pump requires repairs. The fitting of these valve seats is the most difficult part of the pump to construct with the accuracy required. This (referring to Exhibit No. 7) I don't
120 consider a gas-pump at all. It would be entirely useless for pumping gas, for the reason that the valve boxes are cast on the cylinder. Another reason is that the simple leather valve, which cannot be used for a gas-pump. They use the simple leather valve; and the reason is it is impossible to make them tight. Even if it is a good water-pump, it would not do for pumping gas. Though the valves in water-pump may leak back, say, two per cent. of the water, the same valve when pumping gas, would leak back forty-six times as much, or ninety-two per cent. of the full capacity of the pump. The velocity of water under the pressure of the atmosphere is about thirty feet per second; that of gas under the same pressure would be one thousand and four hundred feet per second. I state this to show the accuracy required in fitting up the valves, compared with valves for pumping water. For that reason I consider the detached valve box the essential part of this invention (referring to Exhibit B).

Q. State whether you have been largely acquainted with the different varieties of pumps in the market.

A. I think I am pretty well acquainted with most of the first-class pumps.

Q. Have you ever seen, known, or heard of a pump constructed according to Model No. 7?

A. I have not.

Q. State whether it would be practicable to construct a pump according to Exhibit B, if the valve casings were cast upon the cylinder.

A. I am very sure it would not be practicable; it might be possible.

Q. Why not?

A. In my opinion they could not be fitted up with the accuracy required, if cast on the cylinder. It would be very difficult to make the casting and get a quality of iron in the valve seats that is required for gas-pumps. Heavy castings are liable to be porous. Any slight imperfection in the valve seat would cause it to leak, and ruin the pump. Small, lighter castings are more certain to be perfect.

121 Q. State whether it would be practicable to fit up a pump constructed according to Plaintiff's Exhibit B, if the valve casings were cast solid upon the cylinder, even though the casting was perfect.

A. Not practicable.

And upon his cross-examination by Mr. HUTCHINSON, the witness testifies:

Q. Is or is it not an old device to bolt valve casings to steam or pump cylinders?

A. It is to steam cylinders, but not to gas pumps, to my knowledge.

Q. Is it to water-pumps?

A. I don't think of any where they are bolted on. There are many pumps made with the valve cover bolted on, the seats cast on the cylinder. There are pumps made withthe valve boxes bolted on to the cylinder for water.

Q. Do not manufacturers of pums always fit their pump valves according to the nature of the material to be pumped?

A. They should do so.

Q. Is it not their practice to do so?

A. I couldn't answer that question. I could answer that question for ourselves, not others. We fit our valves according to the kind of substance we have to pump.

Defendants' Exhibits Nos. 3 and 4 shown to witness.

Q. Do these exhibits of defendants Nos. 3 and 4 show correctly the figure of movement of the fluid to and through the passages and valves of the pumps illustrated by Exhibit B of plaintiff and Exhibit No. 7 of defendants?

A. I suppose that (referring to Exhibit No. 3) would represent somewhere near the course of the water. I don't think any two men would make anywhere near the same shaped wire from the same pump.

Q. Does it not also show what would be the course of any fluid as well as water?

A. Oh, yes; just the same.

122 Q. To which pump do you refer, or to both?

A. There is a similarity in the course of the water in the two pumps, but not in the construction.

Q. Are you related to the patentee of the pump illustrated by Plaintiff's Exhibit B; and, if so, what relation?

A. We are cousins.

And being re-examined by Mr. COGSWELL, the witness testifies:

Q. Are you a cousin of the Messrs. Gould, or of Mr. Pollard? Which do you mean?

A. Mr. Pollard.

B. HOLLY.

Further proceedings adjourned until Monday, Dec. 1st, at 12 o'clock m.

Proceedings held open by consent until 4.30 p. m.

Proceedings adjourned by consent until Saturday, Dec. 6, at 10 o'clock a. m.

DEC. 6—10 o'clock a. m.

Present, the counsel for the complainant, and the defendant, George Cowing, in person.

RUFUS F. OSGOOD, being called and sworn for the complainant, on his direct examination by Mr. COGSWELL testified as follows:

Q. What is your age, residence, and occupation?

A. 41 years of age; residence, Rochester, N. Y.; solicitor of patents.

Q. How long have you been engaged in that occupation?

A. The whole time since 1856.

Q. Have you made mechanics a study?

A. I have.

Q. Have you read the plaintiff's patent?

A. I have.

123 Q. The witness is here shown the Plaintiff's Exhibit B and the Defendants' Exhibit No. 7, and is asked: Have you examined these models, and do you understand the devices illustrated by the same?

A. I have examined them. I think I understand those devices.

Q. State whether, in your opinion, the devices illustrated by those models are substantially the same, or substantially different.

A. Substantially different.

Q. State in what that difference consists.

A. In the construction of the chambers or passage-ways, in the method of forming and attaching the valve casings, and the special construction and arrangement of the valve casings.

Q. State the particular arrangement of the two devices, and especially note and describe the differences which you find therein.

A. In Exhibit B a chamber or passage-way for the passage of the gas is cast in one body on one side of the cylinder, and is divided vertically by a partition which extends from top to bottom, and has two ports at each end, opening outward to connect with corresponding ports opening into the valve casings, which are bolted to the chamber. In Exhibit No. 7 two chambers or water-ways are formed, instead of one, and in separate bodies on opposite sides of the cylinder. In Exhibit B, also, I find that separate valve casings are employed, which are bolted outside against the gas chamber or passage-way, while in Exhibit No. 7 the valve-casings are formed solid with the cylinder, with the exception of a cover to each, which is bolted on.

In Exhibit B I also find that the interior is formed with webs, having valve seats and spaces which communicate with a central opening, one above, and the other below the valve, the said central opening communicating also with the cylinder through a port. In Exhibit 7 I find a plane seat of the valve-casing below the cover, with a system of flap valves covering ports between the side passages and the cylinder.

124 Q. State whether in your opinion these differences are substantial or formal.

A. They are different in substance, I think.

Q. Would it be practicable to construct a pump according to the Plaintiff's Exhibit B, with the valve casings cast upon the cylinder?

A. I should think not.

Q. Why not?

A. I should think it would be difficult to core the interior in such a manner as to form the webs in the valve casings, and the communications and ports between the valve-casings and the gas-chamber and cylinder. I cannot say how difficult it would be, as I am not a practical molder.

Q. State whether in your opinion it would be practicable to do the necessary tool-work upon the valve-casings if they were cast upon the cylinder.

A. I should think it would be somewhat difficult to bore the seats for the valves in both the upper and lower casings, which lie one over the other, owing to the difficulty of inserting the tools, especially as the casings would form a part of a heavy and unwieldly article which would have to be placed in position for operation by the tools; but I cannot say how difficult the work would be.

Plaintiff's counsel shows the witness a model of the cylinder of a pump and valve casing, which is introduced in evidence and is marked Plaintiff's Exhibit G, and asks:

Q. State whether there is in your opinion any difference between a pump constructed according to the device illustrated by those models and one constructed according to Exhibit B.

A. No substantial difference.

And on his cross-examination by Mr. HUTCHINSON, the witness testifies:

Q. Were you, at the time plaintiff's application for a patent was made, a member of the firm J. M. Fraser & Co., patent solicitors?

A. I was a member of the firm of J. Fraser & Co., at that time.

125 Q. Was plaintiff's patent obtained by said firm?

A. It was.

Q. Have you read and do you understand plaintiff's patent?

A. I have read it, and think I understand it.

Q. State whether or not the valve casings of plaintiff's pump, as shown in Plaintiff's Exhibit B, are correctly represented by Fig. No. 2, in the drawing attached to said patent.

A. I should think it was. There is this difference, however: it is arranged to receive and discharge the fluid on the opposite side of the pump.

Q. In Plaintiff's Exhibit A does or does not the disclaimer broadly of locating the valves in hollow casings mean that it disclaimed all valve casings having a different figure of movement or flow of the fluid through the same?

(Objected to by the plaintiff's counsel, on the ground that it calls for a legal opinion only.

The evidence is received subject to the objection.)

A. I think not. I think the disclaimer is simply to the broad idea of locating the valves in a hollow casing, without reference to the flow of the medium.

Q. Are you a practical mechanic?

A. I am not.

Q. Is or is not, in your opinion, Fig. No. 2, in Plaintiff's Exhibit A, intended to represent all kinds of valve casings, without reference to their figure of movement or flow of the fluid through the same?

(Objected to by plaintiff's counsel, on the grounds of objection stated to the last question.

Evidence received subject to the objection.)

A. It is difficult for me to reply, as perhaps I do not understand what is meant by all valve casings. The figure indicates, I suppose, only just what is shown.

Q. Is or is not the figure movement or the flow of the fluid through the pumps, represented by Plaintiff's Exhibit B and Defendant's Exhibit No. 7, the same in both?

A. It is similar.

126 Q. Is it not necessary that all double-acting pumps should have tight joints?

A. It is necessary that the joints should be sufficiently tight to prevent the passage of air; that is, in pumps exposed above water.

Q. Is or is not the improvement as alleged in plaintiff's patent a device for producing, as a special purpose in the said invention, tight joints in double-acting pumps?

(Objected to by plaintiff's counsel, on the ground before stated.

Evidence received subject to the objection.)

A. I do not so understand it. It is specially designed for drawing off the gas from the casings of oil wells, and conducting the same to the furnace of the engine, and for this purpose it is recited as a necessity that the joints be tight, and the construction has this special purpose in view.

Q. Does the said patent allege the improvement to be for any other purpose?

(Objected to by plaintiff's counsel, for the reasons assigned.
Evidence received, subject to the objection.)

A. Nothing except the general statement that it is applicable to any ordinary use where a double-acting pump is required.

Q. Does or does not the making of a tight joint in a double-acting pump depend more upon the workmanship than upon the form, position, or arrangement of the parts of the pump?

A. I think it would, but it might depend very much on what the joint was.

Q. Is it not an old device to bolt on valve casings to pumps and engines?

A. I cannot say. I know of no pump having a valve casing bolted thereto except these in question; and I know of no engine having the valve casing bolted thereto.

Q. Is or is it not, in your opinion, any more of an invention to bolt on one kind of valve casing than another on the cylinder of a pump or engine?

127 A. In the abstract sense, I should say not, but much would depend upon the construction and relative arrangement of the parts.

Q. Have you seen and do you understand the application of T. C. Smith, Defendants' Exhibit No. 2, being a copy of the same?

A. I have read the patent, and think I understand the case. I haven't read it very recently.

Q. Referring to the same and to the second claim therein, which is as follows, to wit: "I further claim the specific arrangements herein described of the passages H, H, ports B, C, I, I, cylinder G, and piston A, for the purposes set forth," does or does not the specific arrangement there described cause, when the pump is in operation, a flow of the fluid into and through the parts of the pump having a figure of movement like that illustrated by Defendants' Exhibit No. 4?

(Objected to by plaintiff's counsel as immaterial.
Received subject to objection.)

A. I should think it did.

Q. Can such figure or movement, in your opinion, be obtained by any other arrangement of the parts?

A. I suppose that refers, of course, to the parts shown and described in this patent (referring to a copy of Defendants' Exhibit 2).

Q. Can such a figure of movement be obtained by any other arrangement of the parts of the invention described in Defendants' Exhibit No. 2?

A. I cannot say; I presume it might.

Q. Would or would it not, in your opinion, be any invention to cut off the valve casing of the pump described in the Defendants' Exhibit No. 7, and bolt it on?

A. I think not, in the form it now is in. I think it could not readily be done.

Q. Have you ever had any practical experience in manufacturing pumps?

A. I have not.

RUFUS F. OSGOOD.

Adjourned until 2 o'clock p. m.

128 DECEMBER 6TH, 1873—2 o'clock p. m.

WILLIAM H. POLLARD, being recalled by the complainant, on his direct examination by Mr. COGSWELL, testifies:

Q. Witness is shown the models marked G and is asked who made the same.

A. I did.

Q. What do they represent?

A. They represent the Defendants' Exhibit No. 6 and the Plaintiff's Exhibit F.

Q. What is the Defendants' Exhibit No. 6?

A. It is a valve-casing removed from a gas-pump cylinder manufactured by Cowing & Co.

Q. What is Plaintiff's Exhibit F?

A. It is the gas-pump cylinder from which Defendants' Exhibit No. 6 was removed.

Q. Are these the cylinders and valve-casings lastly manufactured by the defendants?

A. I believe they are.

Q. State whether there is any difference between a pump constructed according to Model G and one constructed according to Plaintiff's Exhibit B.

(Objected by the defendant, on the ground that it is leading and is for the court to decide if there is any difference, and on the ground that it is not alleged in the complaint that the defendants ever made any pumps like Exhibit G.

Evidence received subject to the objection.)

A. There is no difference except in the form and relative position of the openings on the faces of the valve casings and on the cylinder.

Q. Are those differences substantial or formal?

(Objected to by defendants on the grounds last alleged.

Evidence received subject to objection.)

A. Formal only.

Q. Have you any further reason to assign why it would be impractical to manufacture a pump like Exhibit B, with the valve-casings cast upon the cylinder, than those which you assigned on your examination the other day; if so, what is it?

129 (Objected to on the ground that those reasons are not alleged in the patent.

Evidence received subject to the objection.)

A. In addition to the reasons before given, in my opinion it would be entirely impracticable to make such a pump, because in the first place the making of the cores and venting them would be very difficult, and the risk of loss of castings, through imperfections, would be so great that I should consider it entirely impracticable.

And on his cross-examination by Mr. HUTCHINSON, the witness testifies:

Q. Have or have not the plaintiffs, during all the time you have been in their employment, manufactured boiler pumps with the valve-casings bolted on?

A. The plaintiffs have manufactured single-acting boiler pumps without any side-pipe, and with valve-casings, containing each a single valve, bolted on.

Q. For what special purpose were the valve-casings so bolted on, except for convenience and economy of manufacture and repair?

A. For no other purpose.

Q. How does one valve-casing differ from another, except by the figure of movement or the flow of the fluid through them?

A. It may differ in its mode of construction and in material of which its parts are made.

Q. Would not a difference in the figures of movement make a difference in the construction?

A. It might make a difference in the shape of the passages.

Q. Would that difference in the shape of the passages make a difference in the construction?

A. If by construction you mean the making of the patterns for the pump, it would; if you mean the work of the machinist in fitting up the pump, it would not necessarily.

Q. Would it not make a difference in the construction, the word construction having the meaning you have given to it in your testimony?

130 A. I can't answer exactly as to what meaning may have been carried with the word construction in another connection which has escaped my memory.

Q. If it has the meaning in which it is used in your application for the patent of plaintiff, would it not make a difference?

A. It would not.

Q. Does, or does not, Figure No. 2 in plaintiff's patent correctly represent Defendants' Exhibit No. 6, or the part referred to by said figure?

A. The section shown in Figure 2 represents that correctly.

Q. Would the flow of the fluid, as represented by the sectional figure No. 2, be the same as through Defendants' Exhibit No. 6?

A. The flow of the fluid through the valves would be the same, in its passage to the cylinder and its egress from the cylinder being distorted by the pushing of the openings to one side.

Defendants' Exhibit No. 5 is shown witness, and he is asked:

Q. Does or does not Defendants' Exhibit No. 5 correctly represent the figure of movement or flow of the fluid into and through the valve casings of the pump, illustrated by Plaintiff's Exhibit F and Defendants' Exhibit No. 6, to the cylinder and its egress therefrom?

A. It shows, perhaps, as well as a wire model can be made to do so, the direction of the current of gas from its entrance to its exit through the upper valve casing into the upper end of the cylinder.

Q. Would not the same figure of movement exist through the parts at the lower end of the cylinder, as at the upper end?

A. It would not, owing to the fact that the port leading into the cylinder is vertically over the induction port, while on the lower end it is situated on a horizontal plane with the induction port; therefore, while in the upper end of the cylinder the gas passes only in a vertical

131 line through the valve and into the cylinder, on the lower end it has to traverse horizontally the interior width of the valve box before reaching the cylinder.

Q. In plaintiff's pump, as illustrated by Exhibit B, is not the figure of movement at the top and bottom alike?

A. It is.

Q. Would not the difference in form and position of the openings in the valve casings of two double-acting pumps involve a difference in the special construction of the same?

A. It would make a difference in making the patterns, but not necessarily in the principle of the pump.

Question re-read by the examiner, and the witness says:

A. It would not any further than in making the patterns or core-boxes for those openings.

Q. Would making the patterns and core-boxes different amount to a difference in special construction of the pump?

A. In this case I think it would not.

Q. Has or has not the Plaintiff's Exhibit B the same number of joints at each end of the cylinder as Defendants' Exhibit No. 7?

A. It has, with the exception that on Plaintiff's Exhibit B there are two caps to each valve casing.

Q. Is it not customary for manufacturers of pumps to make their valves according to the material to be pumped?

A. It is the custom in the works of which I have charge.

Q. Are you sure there have never been any pumps like Defendants' Exhibit No. 7 made and sold?

A. I do not know of any such having been made or sold?

Q. In pumping gas at the oil wells do the pistons of the pumps work the full length of their stroke?

A. They should do so to get the best effect; but in many cases which have come under my observation they did not.

132 Q. Do not the persons using gas-pumps at the oil wells always face the valves with leather to prevent leakage and pounding or wearing out?

A. In many cases they do, but not always.

WM. H. POLLARD.

The evidence on the part of both complainant and defendants is now closed.

WALTER W. ADAMS,
Sp'l Ex'r.

U. S. circuit court, northern district of New York.

THE GOULDS' MANUFACTURING COMPANY
vs.
JOHN P. COWING ET AL. } In equity.

NORTHERN DISTRICT OF NEW YORK,
County of Monroe, ss:

I, Walter W. Adams, special examiner in this suit, duly appointed upon the stipulation of the solicitors of the respective parties herein, do hereby certify that I have been attended by the parties and their respective counsel, at the city of Rochester, N. Y., as mentioned in the foregoing minutes of testimony; that all of the witnesses therein mentioned as having appeared before me were of sound mind and lawful age, and were by me first carefully examined, cautioned, and sworn to testify the whole truth; that their several depositions were by me reduced to writing in the presence of each of said witnesses respectively from their statements under oath, and after carefully reading the same to them they respectively subscribed the same in my presence.

And I do further certify that I am neither solicitor nor of counsel for any of the parties to this suit, and am in no way interested in the event of the same.

In testimony whereof I have hereunto set my hand this 9th day of December, A. D. 1873.

WALTER W. ADAMS,
Special Examiner.

133, 134 (Endorsed:) U. S. circuit court, northern dist. of N. Y. In equity. The Goulds' M'f'g Co. vs. John P. Cowing et al. Proofs on part of compl't & def'ts taken before sp'l ex'r. Filed Dec. 20, 1877.

135 Circuit court of the United States for the northern district of New York.

THE GOULDS' MANUFACTURING COMPANY
v.
JOHN P. COWING ET AL.

WOODRUFF, *Circ't J.:*

My conclusions in this case are:

1st. That the complainant's assignor, William H. Pollard, was the original and first inventor of the improvement in gas pumps embraced in the letters patent mentioned in the bill of complaint herein.

2d. That the said letters patent are valid, and the rights secured thereby are vested in the complainant.

3rd. That the pump manufactured by the defendants is a plain infringement of those letters patent.

A decree must be entered for the complainant, awarding an injunction and an account as prayed in the bill of complaint.

136 (Endorsed:) Circ't c't of the U. S. for the north. dist. of New York. The Goulds' Manuf'g Company vs. John P. Cowing et al. Mem.

137, 138 U. S. circuit court, northern dist. of N. Y.

THE GOULD MANUFACTURING COMPANY
vs.
JOHN P. COWING, GEORGE COWING AND PHILO Cowing.

Accounting before John N. Pomeroy, special master, appointed by decretal order of the court, dated March 21st, 1874, this 31st day of March, 1874.

Mr. J. B. Perkins, solicitor for the complainant, and Mr. De L. Crittenden, counsel for defendants.

The parties and counsel met this day, pursuant to appointment and summons issued by me.

The counsel for the complainant demands that the defendant produce an account of pumps referred to in the case, made and sold since August 8th, 1871.

139 PHILO COWING, being sworn, testifies he is one of the defendants, and gives the following items of pumps which were shipped by defendants, and the dates are the day of shipment.

The place of shipment of all was at Seneca Falls. The books indicate to whom they were shipped. They were all charged to George W. Winsor, Petroleum Centre, Pa., or to Winsor Bros., at same place.

Aug.	9, 1871	6	March	11, 1872	12
"	10, "	6	April	1, "	3
"	14, "	6	"	17 & 19 "	9
"	17, "	6	May	16, "	5
"	19, "	6	"	20, "	7
"	25, "	6	"	27, "	12
"	28, "	6	June	22, "	12

Sept.	2,	"	6
"	4,	"	6
"	11,	"	12
"	18,	"	12
"	25,	"	12
Nov.	4,	"	16
Jan'y	23, 1872		2
"	24,	"	2
"	29,	"	6
Feb.	3,	"	12
"	10,	"	15
"	21,	"	12
"	27,	"	12
July	5,	"	12
Aug.	24,	"	12
"	31,	"	12
Oct.	25,	"	12
Nov.	6,	"	7
"	22,	"	15
Dec.	26,	"	12
Jan'y	3, 1873		7

The above are all charged on our books to one man, Winsor, as above stated. The following were also shipped:

Oct.	2, 1873		1
"	17,	"	3
"	20,	"	1
"	27,	"	1
Nov.	13,	"	1

The above five items were all shipped to Canada—to Petrolia.

140 Some of the foregoing were manufactured prior to August 8th, 1871.

Q. Can you state how many?

(Objected to by Mr. Perkins, as immaterial.

Answer is received, subject to the objection, and is to be considered by me afterwards.)

A. Yes; there were 33 of them thus manufactured. These 33 were all among those charged to Mr. Winsor. Winsor resided at Petroleum Centre. We gave him the exclusive sale for that region. All we shipped we charged to him. We had specific orders for these different shipments. We had general orders for these Winsor shipments, and afterwards special orders; and the latter part of the season we sent some on our own account. We sometimes received verbal orders from Mr. Winsor. These verbal orders were before August 8th, 1871, and since also. The first verbal order was given to me at the oil region. I was there at the time. I think Winsor gave us verbal orders at Seneca Falls during the time these shipments were going on. He was there several times, and I think he left orders on every occasion. We had written orders from Mr. Winsor. They are not here. I can produce them. I think we received some written orders prior to August 8th, 1871.

Q. Were 33 of these gas pumps, which are charged to Winsor, manufactured and sold prior to August 8th, 1871?

A. Yes, sir.

(Same objection as before.)

Some of these pumps testified to by me have been returned to the defendants. I include the 33 pumps made and sold prior to August 8th, 1871, among those I speak of as returned.

Witness is again asked, and says:

None of the 33 pumps made and sold prior to August 8th, 1871, were returned. I can designate the pumps returned after August 8th,

141 1871. I have a memorandum showing the dates when received by me. The memorandum is a N. Y. Central freight book, charges

against Cowing & Co., for goods received, and indicate the goods received and the dates. The settlements made on this book were made to my knowledge. The book belongs to defendants. I have no recollection of dates independent of this memorandum. We have receipts from the company, also, for every article received.

Three persons constitute our firm—they are the defendants in this action—they were so since July, 1871, up to the present time. Our general business is that of manufacturing pumps and some fire engines, at Seneca Falls, N. Y., and has been so since August, 1871. During that time I have had charge of the office work, accounts, collection, disbursements and receipts. Cowing & Co. buy a large amount of material for manufacturing. During the past 3 years our firm has received mdse. manufactured by us, which has been returned to us. I have had control of the shipment and the receipts of goods and mdse. for our firm. Whatever comes by railroad, we have received by the N. Y. Central Railroad. Between August 8th, 1871, and January 3d, 1873, we received, returned back from Winsor, of those I testified as having been shipped and charged to him 25, if I have counted right. I have not examined all the papers from the N. Y. Central Railroad. I think that 25 is the exact amount. None of those sent to Petrolia, in Canada, have been returned. The pumps returned have been destroyed, broken up, except 2 or 3—broken up by us. The material was not used in the making of other oil pumps. We might, perhaps, have used some parts of them for that purpose. Some of the other pumps sent to Winsor are held subject to defendants' order.

Q. How many?

(Objected to by plaintiff's counsel, as before. Answer received subject to objection, and the question reserved for decision.)

142 A. Thirty are those held by Winsor, and three of those sent to Petrolia are held subject to our order—or rather they are on consignment—they were so shipped on consignment, to be paid for when sold; they are included in the 7 that I testified to this morning. No other of these pumps than these three were sent originally on an agreement for consignment. The pumps sent on November 22d (15), December 26th, (12), 1872, and January 3d, 1872 (7), were sent by us on our own responsibility; they were shipped by us on our own account, without order. The thirty which I said are held by Windsor, unsold, are part of the 34 just spoken of as shipped by us without order. The others sent to Winsor are all sold or returned.

The dates given in my testimony generally indicate the date we sent the goods from our manufactory to the railroad. The dates given in my testimony are the dates the goods left our hands. We have not, to my recollection, made or sold, since the 8th August, 1871, any gas pumps except those testified to by me as above. The two or three pumps returned to us which were not destroyed might have been shipped back. We have a few on hand now, and these 2 or 3 may be among them. I cannot state whether any of the pumps returned to us have ever been reshipped to any one. If they have been shipped, they would be included in the statement that I have already given of pumps shipped.

(Counsel reserves the right of introducing written orders for pumps which the witness has spoken of.)

Cross-examined by Mr. PERKINS:

The list furnished by me shows all the pumps sold by us from August 8th, 1871, to the present time, to the best of my recollection. I obtained

it from our books, and it is correct to the best of my belief. This list does not show all the pumps manufactured by defendants during that time. I don't know how many we have manufactured that are not on this list. I cannot make any estimate. There would not be more
143 than a dozen. Whatever there are are now on hand at our factory. There may not be that number; it is mere guesswork. They have not been sold or contracted to be sold. They are not used by us for any purpose. I can state how many gas pumps we had delivered from our shop before August 8th, 1871.

Q. How many?

(Objected to by counsel for defendants as immaterial.

Question admitted as the other, subject to further decision, reserving my decision, and subject to the objection.)

A. Thirty-seven (37). This number is also obtained from our books; these left our shops prior to that day. These had all been shipped by railroad from Seneca Falls prior to that day. They had all been shipped to Winsor Bros., at Petroleum Centre. We were then shipping the pumps as soon as we got them complete, ready for use. Winsor Bros. were not our agents. They bought from us. We had orders for these machines from Winsor Bros., before August 8th, 1871. The orders were both specific for so many machines, and also general orders for so many as we could send—we had both kinds. Winsor Bros. sold our pumps to other parties. We shipped pumps both to Winsor Bros. and also to the parties they designated—both ways. I can't recollect how it was as to these 37; in both manners I suppose. The terms of sale to Winsor Bros were cash. Cash sometimes meant 30 days, and sometimes not; sometimes we got a note for them. I can't tell whether Winsor Bros. paid for these pumps before they got paid for them.

Q. When did you receive your pay from Winsor Bros. for the 37 pumps?

(Objected to by defendants' counsel.

Same ruling as before; if not connected, to be struck out.)

144 A. I couldn't answer that now, not having any memoranda. The pumps were delivered to Winsor Bros., at the depot at Seneca Falls. I suppose Mr. Winsor paid the freight; we did not. These 37 pumps were charged on our books at 3 different dates, all prior to August 8th, 1871. I can give the date, viz, July 18th, 1871, 19 pumps, which includes 1 sent before; July 24th, 6 pumps and August 1st, 12 pumps. These charges were made on those days. For all these pumps we had Windsor Bros.' orders.

The 33 pumps manufactured prior to August 8th, 1871, and delivered after that day, were in our shop on that day, and were delivered at the various dates subsequent in August, as stated on my list.

Twenty-five pumps delivered to Winsor were afterwards returned. These pumps appear on the list of pumps delivered. They were not among those delivered prior to August 8th, 1871. We received these pumps back. We credited Winsor with these pumps for as much as we had charged him. They were returned because they were defective—made wrong—they had not been made according to Mr. Winsor's directions.

On November 22d, December 26, 1872, and January 3d, 1873, we sent Winsor, in all, 34 pumps. We charged Mr. Winsor's account with these pumps when they were delivered. We sent them without any orders. They still stand charged to his account on our books. He received them, and they are now in Pennsylvania, for anything I know to the contrary. We have not got them. The pumps sent to Winsor or Winsor Bros.

have been charged to him or them on the day of their delivery at Seneca Falls, or within a day or two of that time. The Winsors have never paid for pumps until they have been delivered at the Seneca Falls station. They are not liable to us for the pumps until we deliver the pumps.

The three pumps now in Petrolia were ordered to be paid for
145 when sold. These are the three I said were sent on consignment. They stand charged on our books to some person. Rebig Hine is his name. They are now in Canada, as I understand. Mr. Hine has a right to sell them.

Redirect by Mr. CRITTENDEN:

The 10 or 12 pumps at our shops at Seneca Falls are in different rooms in our shop; some up-stairs, some down-stairs. Some are painted I don't know of any not painted. In these 10 or 12 I included the 3 received back from Winsor, which were not broken up. They are not all in fit condition for sale.

(Counsel for plaintiff avers that he does not claim for these 10 or 12 pumps now on hand.)

I can't just now state how long previous to August 8th, 1871, we received the order for the 37 pumps delivered prior to that day. I think I can produce the order. The entries for these 37 pumps was made on our books at the dates they were shipped—not made afterwards and dated back. I don't know as there is anything on our books indicating the pumps sent on commission, or what pumps were sent on commission. I think the 37 pumps spoken of were sent on both verbal and on written orders. Think I can produce the written orders for them. After an order is received, it takes towards a month to get the pumps ordered manufactured ready for delivery. I don't recollect anything about the time when the order was given for the pumps shipped August 1st, 1871, nor of the other two shipments prior to that. The goods charged to Winsor, were sometimes directed by us to third persons, and were sent to other parties by his order, but all charged to Winsor or Winsor Bros.

The mode of payment, whether by cash or note, has not been a matter of agreement between us and Winsor. The single pump sent by express was sent July 4th, 1871, and is included in the charge of 19 on July 18th, 1871. That was pursuant to an order. It was a sample pump. Can't say whether that order was given at Seneca Falls.

146 The defect on the 25 pumps returned was that they were some of them too short—they were not usable as a perfect manufacture. Nothing on the books indicate that the 34 pumps spoken of were consigned. I suppose Mr. Winsor still resides at Petroleum Centre. He is now absent. He is now in Virginia. He has been absent 2 or 3 months, I think.

Q. When did you receive notice that these 30 pumps were subject to subject to your order?

(Objected to as before, by Mr. Perkins.

Same ruling as before.)

A. I can't tell the date. It was some time before he left Petroleum Centre. It was a year ago, I think it must have been. It was prior to January 1st, 1874.

(Counsel reserves right to introduce writings.)

I have not received pay for the 34.

(The last was objected to, and received subject to the objection, as before.)

The three sent to Petrolia were sent on the agreement that they were to be paid for when sold. I think we have Hine's written order for

these three. I think I can produce it. They were all we sent to Petrolia on commission or conditional order.

Recross:

The 34 pumps sent on commission to Winsor still stand charged to Winsor. He is not our agent. We send goods to Winsor, and he has a right to sell them to whom he pleases, and get his pay as he can.

Redirect:

Q. How long after the shipment of these 34 did you receive the notice that the 30 pumps stood subject to your order?

(Objected to as before, by Mr. Perkins.

Ruling as before.)

A. We received a notice soon after. Can't tell whether we got distinct notices after each shipment.

147 Recross:

Winsor since made a general statement that he has 30 pumps on hand. I don't know when he received those 30 pumps that he still has on hand. We were informed that he had 30 on hand very near a year ago.

Redirect:

Q. Has Mr. Winsor paid you for all the pumps, other than these three last shipments—34?

(Objected by Mr. Perkins.

Answer received subject to objection, and Mr. Perkins excepts.)

A. They were all paid for. The notice spoken of was given to us in connection with an accounting for the rest of the pumps.

PHILO COWING.

Adjourned to April 13th, 1874, at 10 a. m.

MONDAY, *April 13th*, at 10 a. m.

Parties met as before. The defendants by Mr. Murray, their counsel.

PLAINTIFF'S CASE.

JAMES H. GOULD sworn for plaintiff, and examined by Mr. PERKINS:

I am treasurer of the plaintiff. Its business is manufacturing iron pumps and other iron goods, at Seneca Falls, N. Y. It has been so engaged since 1862—part of the time, prior to 1869 and 1870, under another name. Our shops and sale room are in the same village with the defendants. We have a large manufactory. We have been engaged since August, 1871, and for some months prior to that, in the manufacture of gas pumps, such as described in the letters patent issued to the plaintiff, and set out in the bill of complaint in this case—the same sort as have been manufactured by the defendants. We have sold a large number of those pumps during that period—about 700 in all—that is, since we commenced making any. During all that time we

148 have been provided with the machinery and appliances necessary to the manufacturing of these pumps in large numbers. We could have manufactured 400 more such pumps during the time since August, 1871. We could have made them if we had had the orders. We would have needed no additional shops and capital in order to manufacture such pumps.

(The above two last answers are taken subject to an objection by de-

fendants' counsel, that they are immaterial. I think they are, but do not finally pass upon them.)

I heard Mr. Cowing's evidence on this examination; I know one of the Messrs. Winsor spoken of by him—they carried on the business of selling pumps at Petroleum Centre, Pennsylvania. We formerly sold gas pumps to them, and then they stopped buying of us and commenced giving orders to defendants. Since August, 1871, we have had an agent for the selling of our pumps at Titusville Pennsylvania—that is a very short distance from Petroleum Centre—12 or 15 miles, I believe. The principal sale of gas pumps is in the oil regions, in Pennsylvania; both Petroleum Centre and Titusville are in the center of what are known as the oil regions in Pennsylvania. We arranged it to obtain orders coming from various parts of the oil regions of Pennsylvania; we had an agent for the sale of these gas pumps at Petrolia, Canada; we had orders for gas pumps from that place. Since August, 1871, those which we sent to Pennsylvania we sold at the following rates: 14-inch pumps at $125 less 35 per cent. discount—that is the discount allowed our agent; those sent to Canada, same size, at $125, less 25 or 30 per cent. discount. We charge the machines to the agent at these figures, taking off the discount mentioned. The 12-inch pumps we sell at $110, subject to the same discount. We have made few of these 12-inch pumps since August, 1871; those sold in Canada the price given is in U. S. currency. Of all the pumps we sold since August, 1871, I should say one-fourth were
149 12-inch pumps, but this is not stated positively; it is simply my best recollection, not stated as a fact. We do not pay the freight charges on gas pumps sold by us; I think we charge cartage to the station in Seneca Falls; we don't pay it there.

I have computed the entire cost of manufacturing gas-pumps as manufactured in our shops since August 8, 1871. In making this computation I have estimated the items of material and labor; these are all the items which enter into the cost of a pump—the material and the labor.

Q. State what the cost has been of manufacturing gas-pumps at your shop since August, 1871.

(Objected to by defendants' counsel. (1) It is not the proper way to prove plaintiff's damages; (2) the evidence of witness shows his incompetency to answer that question, from the statement he has made as to the basis upon which he makes the estimate; (3) the question is immaterial.

The answer taken subject to the objection. The decision is postponed.)

A. The 14-inch gas-pumps cost $33.54; the 12-inch gas-pumps cost $27.06.

JAMES H. GOULD.

Adjourned to Wednesday, 22d of April, at 10 o'clock.

Wednesday, April 22d, parties met as before. Plaintiff represented by Mr. Perkins, defendant represented by Judge Foote and Mr. J. B. Murray, of Seneca Falls.

Examination by defendant':

The defendants renew the objection made to the last question put to the plaintiff's witness at the last day's examination, and which was reserved.

Mr. Murray objects, (1) that the question and testimony is too indefinite; (2) the rule of damages assumed by plaintiffs is not the correct one. The plaintiff is not entitled to the difference between the cost and

price of plaintiff's pump; claims that the measure of damage is the difference between the cost and selling price of the pump the defendants manufacture and sell; (3) the basis upon which the witness swore to the damages is too indefinite; he didn't put in but two items in the cost of a pump; claims that there are other items.

Mr. Murray adds, that under the first head of objection he means that Mr. Gould's testimony does not show what part of the pump is patented.

Judge Foote adds on same side: Plaintiff has suffered no damage; plaintiff might have made other pumps as well, and also that plaintiff's pump and defendant's pump are not shown to be the same.

Mr. Perkins, in reply: No proof before the master that there are any other pumps, &c.; 2d, argues that plaintiff has a right to recover the profits on the whole machine.

Judge Foote, in reply, refers to the testimony in the case, and says it is to be regarded as in evidence.

Decision.

The master decides and holds:

1st. That the objection to the questions put to and answers made by Mr. Gould, referred to above, on the ground that they are too indefinite, in that they do not show that he has included sufficient items in his computation to make the basis thereof, and that he has shown himself incompetent to make a computation and estimate of it, is overruled on the ground that the question and answer are not incompetent on these points, but defendants must, if they desire, make the matter more definite and certain by cross-examination.

2d. That the objection that the pumps made and sold by defendants is not shown to be the same as that made and sold by the plaintiff, and that the plaintiff cannot have suffered damage by defendants making and selling such pumps, because it can be shown that there were other pumps in the market which could be made and sold at the same or greater profit, is overruled on the ground that such objection goes behind the decree in this cause and would open it again. I hold that no evidence of the sort could be introduced by defendants.

151 3d. The objection as to the proper measure of damages, viz, whether plaintiff is entitled to recover the profit made on the making and vending of the entire pump, or only that part of the same referable to the patented portion of the entire pump, I reserve for further consideration.

(The defendants' counsel except to this ruling.)

Mr. Philo Cowing recalled for defendants and examined by Judge FOOTE:

Question by Mr. FOOTE:

Q. At the time you made the gas-pumps mentioned in the bill of complaint in this case, were there other gas-pumps without the plaintiff's supposed improvements that the defendants had a right to make, and that were open to the public, and that were adequate to enable the defendants to obtain an equally beneficial result as that obtained by the complainant's supposed improvements? And, if so, state what such other pumps were, and when any advantage was obtained by making or selling the pumps mentioned in the bill of complaint over and above that which would have been derived by making some or any of such first-mentioned pumps.

(Question objected to by plaintiff's counsel as immaterial.

The objection is sustained on the ground stated above, that the question goes behind the decree in this case, and the defendants' counsel excepts to this ruling.)

It is agreed that the pleadings and proofs are to be taken as in evidence before me. It is in the case that the plaintiff's pumps were properly stamped, and that the plaintiff gave notice to the defendant.

Defendants rest.

Held open till 3 o'clock p. m.

152

153 3 O'CLOCK P. M.

Parties met as before.

Mr. PERKINS, for the plaintiff:

No. of pumps made in all are made by def't 323
Of these ret' 25

Leaving 298

Claims to charge def'ts on all these.

" " 33 pumps made prior to letters patent issued to pl'ff.

Claims for the pumps in Winsor's hands unsold, &c. Notified that they are at def'ts' orders.

Judge FOOTE, for the def'ts:

Refers to testimony in the case, p. 31, fol. 154, as to pumps made and sold by def't prior to Aug. 8, 1871. Refers to a provision in patent act giving a person a right to use specific articles made prior to the issuing the letters patent.

Pl'ff has not given any details by which I can make a report. Many other items enter into the cost of a pump besides "the material and labor"—among others, interest on capital, cost of selling, cost of
154 collecting, &c., &c. Pl'ff didn't invent all the pump. Reads from the specifications as to what patentee really did invent, and what the patent covers.

Mr. PERKINS, in reply:

Speaks of the statute cited by Judge Foote, and claims that it don't apply to this case.

Machines in Penn. are not in hands of def'ts' agents, and not covered by the injunction.

As to the cost of the pumps, refers to the testimony of Mr. Gould, that no more capital or shops would have been necessary to build these machines, and no expenses of selling, no presumption of losses in sale; others sold must prove that.

155, 156 (Endorsed:) U. S. circuit court, northern district of N. Y. In equity. The Gould Manufacturing Company vs. John P. Cowing et al. Testimony taken on final accounting. Filed Dec. 20, 1877.

157 Circuit court U. S., northern district of New York.

THE GOULDS' MANUFACTURING COMPANY }
vs.
JOHN P. COWING AND OTHERS. }

HUNT, *Justice:*

Upon the hearing of this case upon the merits, it was adjudged by the

court that the patent to the plaintiffs, dated August 8th, 1871, was a valid patent, and that the defendants were infringers in respect to all the pumps manufactured and sold by them subsequent to that date. It was referred to a master to ascertain and report the complainants' damages. The master reported that the complainants should recover damages on 298 pumps manufactured to the amount of $47.71 per pump. To this report the defendants filed exceptions, and the case now comes before the court on the hearing of such exceptions.

The principal question arises upon the third exception, and regards the rule for the measure of damages adopted by the master. The
158 complainants proved the expenses of making and selling the pumps in question; that they were prepared and ready to fill the orders taken by the defendants, and the prices at which the pumps were sold by the defendants. The master found the damages to be the difference between such expenses and such prices, and reported accordingly.

If the plaintiffs had been the inventor' and patentee' of pumps, or of double acting pumps, the argument would have been strong in favor of the rule adopted. But the invention patented and infringed was of an improvement upon pumps merely. Such was the decree, which did not restrain the defendants from making pumps, or even the pumps in question, but only certain devices forming a part thereof, and which devices the court adjudged to be an improvement belonging to the plaintiffs, which had been infringed by the defendants. The decree adjudges that the letters patent in question "for an improvement in gas-pumps, dated August 8th, 1871, and were particularly set forth in the complaint, were and are valid in law, and that the defendants infringe' on the rights
159 secured thereby;" and the defendants are restrained "from making, using, or vending the device or improvement secured thereby." In making his report, the master says: "While admitting, of course, the doctrine that, in some cases, the profits resulting from the mere improvement must be separated from those of the entire machine and allowed to the plaintiff as the sole measure of damages, I am unable to see how, upon any correct principle, this separation can be made in the present case. I have said, in the opinion accompanying this report, that, as it appears to me, the comparison must be made between the machine as it stands, with its patented improvements, and what would be left of the same machine if these improvements were taken away, and not between this machine, with its patented improvements, and any other one having the same general character, not patented, and used in the business and sold in the market. If this criterion is the correct one, and for the purposes of this decision I hold it to be so, it is very plain that, if the patented improvements on this gas-pump are removed, there is nothing left which can be called a machine, and
160 in respect of which any profits can be predicated. I distinctly hold then, in order that the question may be distinctly presented—although it seems to me to be a matter of law, a sort of construing the machine in the same way that a court construes a writing—that the profits resulting from the patented portion of this pump cannot be separated from those resulting from any other part of it." In concluding his report, he says: "In conclusion, I find and report that the plaintiffs are entitled to recover as 'damages' sustained by them by the sale of the aforesaid 298 pumps by the defendants, as aforesaid, at the rate of $47.71 for each pump so sold by the defendants, that being the whole profit which, as appears from the evidence, the plaintiffs would have made from the sale of each entire pump."

Pumps have been in use since the earliest ages of the world. Double acting pumps like the one in question have long been in use. Double acting pumps, having cast a side chamber to allow the medium to follow the action of the plunger, have long been in use; and, in this patent, it is expressly stated that this is not claimed as an invention of the
161 plaintiff's. The base, the cylinder, the top, the piston, are the same in general arrangement as are used in ordinary double acting pumps. These things are not claimed by the plaintiffs to be within their improvement. Their use is free to the defendants. Only a special construction of the side chamber is claimed, whereby the same is adapted to use with the valve casings bolted on the outside. Valves must exist in every pump, and they must open on the outside. They are located in hollow casings but this the inventor in his patent says that he does not claim. A valve-box or valve case (that is, the portion of the passages to and from the cylinder that contain the valves, cut off from the rest, for the convenience of fitting the valves and then bolted on again to the outside of the cylinder) is a valuable device forming a part of this machine; but it *it* is not claimed to belong to the plaintiffs, although the specification is said to have been drawn with reference to it. I do not pursue the analysis of the patent so carefully carried out by the defendants' counsel, showing all the parts which were in use before the alleged improvement, and showing specifically what the
162 patent claims. Enough has been said to present the main question in the case, viz: Whether the patentees can recover the profits for the manufacture of the entire pump, or whether their claim is limited to the profits upon the improvement embraced within the patent. The master concedes the latter to be rule in some cases; but if I understand his reasoning, above quoted, he takes this case out of it on a ground that, I think, cannot be sustained. The comparison is to be made, he says, "between the machine as it stands, with its patented improvements" (the plaintiff's improvements, I assume), "and what would be left of the same machine if these improvements were taken away, and not between this machine with its patented improvements, and any other one having the same general character, not patented, and used in the business and sold in the market." The portion of the pump in question which belongs to or is included in the improvement of the plaintiffs is very small, and a machine constructed upon other known principles and devices applicable to pumps, omitting the plaintiff's improvement, would include nearly everything useful that is
163 to be found in the present machine. A different view of this matter of fact is the basis of the master's opinion. I judge the master holds the plaintiff's improvement to be more extensive than it is.

The proposition is simply this: The patentee takes the well known portions of a pump used in pumping gas-oil, with passages, valves, piston, chambers, openings, &c., as ordinarily made and used, and adds a chamber of an improved construction, as it is alleged, and in combination with certain other parts described. Now, if this addition is not a new and useful improvement, no damages can be claimed for its use. If it is such an improvement, the improvement in its nature and by law is and must be capable of being described and pointed out, and must be described and pointed out. Every skilful mechanic must be able to learn from the patent itself precisely what the monopoly covers. (Act of July 8th, 1870, § 26, 16 U. S. Stat. at Large, 201.) If this alleged improvement is so confounded with portions of the machine which are the subjects of other patents, or which from long-continued use are open to the public, that it cannot be separated from them, or if, when

so separated, it has no value, it is not a patentable invention, and
164 no damages are due for its use. The decree in this case has adjudged the patent to be valid. In its nature, therefore, it is and must be capable of separation and distinction from other portions of the machine. The ruling of the master, that the profits arising from the improvement of the plaintiffs cannot be separated from the profits of the machine generally, seems to be based upon the idea that the improvement of the plaintiffs is all that is valuable in the machine. I cannot but consider this a great mistake, as I have already shown.

I understand the rule to be settled that when the patent is for an improvement upon a machine, the damages for the infringement of such patent are confined to the profits made by the use of the improvement only, and not by the manufacture of the whole instrument. What profit or advantage did the defendants obtain by the use of plaintiff's improvement? What advantage did they have that they would not have had if they had built their machine without the improvement? In Phillip v. Nock (17 Wall., 460), although the case did not, perhaps, require an adjudication of the point, the rule is thus laid down by Swayne,
165 J.: "Where the infringement is confined to a part of the thing sold, the recovery must be limited accordingly. It cannot be as if the entire thing were covered by the patent, or, where that is the case, as if the infringement were as large as the monopoly. * * The plaintiff must show his damages by evidence. They must not be left to conjecture by the jury." In Mowry vs. Whitney (14 Wall., 620, 649) the precise point before us was in question. The defendant was charged by the master with $91,000 as the profits arising from the use of the plaintiff's patent in manufacturing car-wheels, which was the profit obtained from the manufacture of the entire wheel. In delivering the opinion of the court, Strong, J., says: "It is clear that Whitney is not entitled to receive more than the profits actually made in consequence of the use of his process in the manufacture of the 19,819 wheels. It is the additional advantage the defendant derived from the process—advantage beyond what he had without it—for which he must account; * * but the master charged the profit obtained from the entire wheel, instead of that resulting from the use of Whitney's invention in a part of
166 the manufacture. * * It is as true of a process invented or an improvement in a manufacture as it is of an improvement in a machine, that an infringer is not liable to the extent of his entire profits in the manufacture. The question is, what advantage did the defendant derive from using the complainant's invention over what he had in using other processes then open to the public, and adequate to enable him to obtain an equally beneficial result. The fruits of that advantage are his profits. They are all the benefits he derived from the existence of the Whitney invention."

The burden of proof rested upon the complainants. The damages to the plaintiffs, or the profits to the defendants (they are the same thing), must be proved like the other points in the case. For all the profits or advantages with which they have been charged (except that precise advantage derived from using the plaintiff's improvement), the defendants may still be liable to other inventors, or they may have already paid for them to those inventors. Upon no principle can the plaintiffs assume that they belong to themselves, and call upon the defendants to
167 disprove this assumption. It is not necessary further to examine the cases on this point. The Supreme Court have decided it explicitly; and if there are cases found to the contrary, they must be considered as overruled. The master should have decided that, as the

plaintiffs had failed to show the profits or damages arising from the use of the improvement, nominal damages only could be recovered.

The third exception is allowed, and, as it goes to the basis of the entire recovery, it is not necessary to consider the other exceptions in the case.

WARD HUNT.
Asso. Just. Sup. C't U. S.

JULY 10, 1874.

168 (Endorsed:) U. S. circuit court, northern dist. of N. Y. The Goulds' Manuf'g Company vs. John P. Cowing and others. Opinion of Hunt, justice. Filed July 10, 1874.

169 U. S. circuit court.

THE GOULDS' MANUFACTURING COMPANY
vs.
JOHN P. COWING & OTHERS.

UTICA, *October 9th*, 1875.

Reference at my office on accounting.

It is agreed that the def'ts, since Aug. 8, 1871, have made 298 pumps, for which they are accountable to the pl'ff.

PHILO COWING, sworn, says that he had charge of the manufacture of these pumps. These 298 were all 13-inch pumps. (We sold these pumps for $80 a piece.) Objected.

Ev. of Jas. H. Gould on the former reference in fol. 72 to 83 of the printed case is read in ev., subject to any objection.

Philo Cowing, ev. read from fol. 30 to 34 of the printed case, also 36 of the ev.

WILLIAM H. POLLARD, sworn, says that Ex. I is a copy of pl'ff patent put in ev. I am the inventor named in these letters patent.

170 The pumps manufactured under this patent were put on the market the 8th Aug., 1871. We claim that the patent covers the valve-boxes and passages in combination with the cylinder and other parts common to all pumps, thereby making a pump of an improved construction. I am familiar with the manufacture and sale of these pumps. It is utterly impossible for me to give the profits from the manufacture and sale of any particular part of this pump; the profits arise from the sale of the whole pump. Before we commenced manufacturing this pump 2 or 3 different rotary [illegible]ere in use exclusively for manufacturing gases from oil wells. Then a piston pump was introduced, built in Erie, Penn., which for a short time had a large sale. Upon the introduction of our pump it virtually controlled the market and drove all others from the market. There were a few others, I presume, put in; def'ts' agent, Wenson, formally sold for the pl't'ff. He ceased. We made a general agent in 1870. After Wenson ceased selling for us, he commenced selling pumps for def'ts made like ours. The def'ts, after

171 Aug. 8th, 1871, made no other pump than these.

No additional expense that I know of to make 400 more at our works except the costs and material, as we had facilities for doing it in our shops. 14-inch pump cost a tittle more than 13-inch. Material cost more, &c.

X-d:

I am the patentee and am pl'ff's mechanical superintendent in the works and have been for about 9 years, and have charge of all the manufactures. I am called away from the shop to make sales, but can't tell the No. of times 1871, '2, or '3. I am acquainted with the most of the pumps in the market. I am acquainted with Douglass Manufactury's pump in Connecticut: can't say I am all. I have not visited all the oil wells in Canada. I have been to a great many of the oil wells in Penn. With the patented parts removed from the pump it would not be a pump, and so can't tell the profits arising from any part of that pump. I think it would impossible for any one to ascertain the profits arising from the manufacture of any particular part of these
172 pumps—I mean to say it would be impossible to ascertain the profits arising from the manufacture of any one or more of the parts less than the whole. There is a piston-pump made at Erie, Penn. Foster's rotary was in use before our pump, and they . A pump might work perfectly with water and be worth nothing, owing to necessary difference in the construction of the valves and passages. The valves require closer fitting for gases than would answer for water. It does not require larger passages for gases than water. Some of our valves were faced with leather and others not. Water-pumps are the greater part of them faced with leather. A steam engine would not pump gases.

173 Circuit court U. States.

THE GOULD MANUFACTURING COMPANY }
vs.
JOHN P. COWING AND OTHERS. }

NOV. 5TH, 1875.

WILLIAM H. POLLARD recalled by pl'ff.

The component parts of any possible double-acting piston pump must consist of *of* cylinder, a piston, and four valves or their equivalent, and the necessary side pipes, connecting valves or valve casings, and cylinder with an inlet and outlet.

State what difference there could be between any two double-acting piston pumps.

Answer. The difference must consist in the different manner of arranging and proportioning and combining these necessary parts.

The only improvement that could be made in any pump would be in the difference in combining and constructing these necessary parts.

(This is taken subject to any objections that may be made.)

174 JOHN P. COWING recalled by pl'ff.

State the expense of manufacturing these pumps.

Answer. I have made it out and ex. shows it.

We manufacturing these pumps and continued to manufacture them at $31.37 a pump. I don't know as there was any profit at all at the price we sold them. We began to manufacture these pumps before the patent was issued and continued to manufacture them until Jan'y, 1873. We manufactured and sold more than 300 of these pumps, and during all this time I don't think we made any profits. The demand in the oil regions ceased a little before Jan'y, 1873. We manufactured and sold these pumps as long as any one would buy them. The figures

I have made are my own estimate of the costs. There is no figures on my books. I have estimated the material and work that were put into these pumps. We carried on large manufacturing business other than these pumps.

The court here adjourned for dinner, one hour.

175 PHILO COWING continued, says that before I com'd the manufacture of these pumps I had the same capital invested. The same shops and paid the same rent at Seneca Falls and N. Y., the same for clerk hire in N. Y., and for office work and foreman at Seneca Falls, and the same for insurance and taxes. The only increased expenses was the cost of manufacturing the pumps and the expense of the material. The men worked on several pumps together. We generally buy in the fall what iron we want for the winter and spring. Can't say how it was in the fall of 1872. I made this estimate a day or two ago, and I made out the cost of manufacturing one pump.

WILLIAM H. POLLARD recalled by pl'ff.

I have had charge of the manufacturing these pumps for a number of years at Seneca Falls. These pumps are manufactured several at time. The manufacturing of the pumps have been estimated. I manufactured 12 pumps and took an accurate account of all material
176 and labor of 12 pumps. I made a statement on 14-inch pump. Costs $33.54. This was made in the winter of 1871 and '2 These figures show the actual costs of these pumps, including everything. I have made statement of the cost of these 12 fourteen-inch pumps, and this paper ex. shows it. The work for item No. I was not over 30 cts. Any man would do this work on six pumps per day. The 2 item would cost $4 00 per pump. No. 3 item worth $1.50. Cost that. No. 4 item, exclusive of the valves, cost about .50 for a pump, take about 2 hours' time. Item 5 not to exceed 75 cts. Item 6 should say 50 cts. Item 7 cost about 30 cents. Item 8 cost about 3 cents per pump. Item 9 cost nearly nothing. A man would cast 100 an hour. Item 10 cost ten cents. Item 11 cost 10 cents. Item 12, 14 x 27 cast, cost $1.00. This all the foregoing on the pump. Item 13 cost, half-pound, 6 cents. 2 pounds is not required. Item 15, iron for bolts, cost 8, 60 cents. Item 16, nuts for bolts, 17 nuts, cost 20 cents. Item 17 cost about 30 per pound and 9 pounds per pump. Item 18 cost 30 cents.
177 Item 19, castings, weighs 578 as it stands, and 43 pounds to come out, leave 535 pounds. 575 would be weight of castings in the rough. The chips are worth ¾ of a cent per pound. Iron worth from 35 to 36 per pound. Item 20, 25 cents per pump. Item 21 & 22 cost about $2.50 per pump. Item 23, 25 lbs. iron, worth $1.00, 4 per pound. Item 24 cost 50 cents, 2 hours' work. Painting, striping, and varnishing 50 cents. Item 25 cost 55 cents, 5½ lbs., costs 10 cents per pound. Item 26 cost 56 cents. Item 27, 8 lbs. of iron, 4 cents pound, 8 lbs., 32 cents. Item 28 are included in item 19. Item 29, 10 cents each, 20 cents for each pump. Item 30 & 31 are not the cost of the manufacture. Item 32 is included in items 21 & 22. George said to me he thought they were building these pumps cheaper than we were. The aggregate cost of a pump is $31.37. 13-inch pump would cost a little less than a 14 inch.

JAMES H. GOULD, recalled: I have the general superintendence of the pl'ff's and their treasurer, and acquainted with the manufacture.
178 These 12 pumps, spoken of by Pollard, were made under my directions. I have heard his evidence, and he has stated correctly the

costs of making these pumps. He has stated correctly the various items of expense.

X-d.: This company is a chartered co., and I am a stockholder and own some of the stock.

The following testimony, given on the hearing before J. N. Pomeroy, master, was read in evidence from the printed report of said master.

179 PHILO COWING, being sworn, testifies he is one of the defendants, and gives the following items of pumps, which were shipped by defendants, and the dates are the day of shipment.

The place of shipment of all was at Seneca Falls. The books indicate to whom they were shipped. They were all charged to George W. Winsor, Petroleum Centre, Pa., or to Winsor Bros., at same place.

Aug.	9, 1871	6	Feb.	21, 1872	12
"	10, "	6	"	27, "	12
"	14, "	6	March	11, "	12
"	17, "	6	April	1, "	3
"	19, "	6	"	17 & 19, "	9
"	25, "	6	May	16, "	5
"	28, "	6	"	20, "	7
Sept.	2, "	6	"	27, "	12
"	4, "	6	June	22, "	12
"	11, "	12	July	5, "	12
"	18, "	12	Aug.	24, "	12
"	25, "	12	"	31, "	12
Nov.	4, "	16	Oct.	25, "	12
Jan'y	23, 1872	2	Nov.	6, "	7
"	24, "	2	"	22, "	15
"	29, "	6	Dec.	26, "	12
Feb.	3, "	12	Jan'y	3, 1873	7
"	10, "	15			

180 The above are all charged on our books to one man, Winsor, as above stated.

The following were also shipped:

Oct.	2, 1873	1
"	17, "	3
"	20, "	1
"	27, "	1
Nov.	13, "	1

The above five items were all shipped to Canada—to Petrolia.

Some of the foregoing were manufactured prior to August 8th, 1871.

Q. Can you state how many?

(Objected to by Mr. Perkins, as immaterial.

Answer is received, subject to the objection, and is to be considered by me afterwards.)

A. Yes; there were 33 of them thus manufactured. These 33 were all among those charged to Mr. Winsor. Winsor resided at Petroleum Centre. We gave him the exclusive sale for that region. All we shipped we charged to him. We had specific orders for these different shipments. We had general orders for these Winsor shipments, and afterwards special orders; and the latter part of the season we sent some on our own account. We sometimes received verbal orders

181 from Mr. Winsor. These verbal orders were before August 8th, 1871, and since also. The first verbal order was given to me at the oil region. I was there at the time. I think Winsor gave us verbal orders at Seneca Falls, during the time these shipments were going on. He was there several times, and I think he left orders on every occasion. We had written orders from Mr. Winsor. They are not here. I can produce them. I think we received some written orders prior to August 8th, 1871.

Q. Were 33 of these gas pumps, which are charged to Winsor, manufactured and sold prior to August 8th, 1871?

A. Yes, sir.

(Same objection as before.)

Some of these pumps testified to by me have been returned to the defendants. I include the 33 pumps made and sold prior to August 8th, 1871, among those I speak of as returned.

Witness is again asked, and says:

None of the 33 pumps made and sold prior to August 8th, 1871, were returned. I can designate the pumps returned after August 8th, 1871. I have a memorandum showing the dates when received by me.

181½ The memorandum is a N. Y. Central freight book, charges against Cowing & Co. for goods received, and indicate the goods received and the dates. The settlements made on this book were made to my knowledge. The book belongs to defendants. I have no recollection of dates independent of this memorandum. We have receipts from the company also for every article received.

Three persons constitute our firm. They are the defendants in this action. They were so since July, 1871, up to the present time. Our general business is that of manufacturing pumps and some fire-engines, at Seneca Falls, N. Y., and has been so since August, 1871. During that time I have had charge of the office work, accounts, collection, disbursements, and receipts. Cowing & Co. buy a large amount of material for manufacturing. During the past 3 years our firm has received mdse. manufactured by us which has been returned to us. I have had control of the shipment and the receipts of goods and mdse. for our firm. Whatever comes by railroad we have received by the N. Y. Central Railroad. Between August 8th, 1871, and January 3d, 1873,

182 we received returned back from Winsor, of those I testified as having been shipped and charged to him, 25, if I have counted right. I have not examined all the papers from the N. Y. Central Railroad. I think that 25 is the exact amount. None of those sent to Petrolia, in Canada, have been returned. The pumps returned have been destroyed, broken up, except 2 or 3—broken up by us. The material was not used in the making of other oil pumps. We might, perhaps, have used some parts of them for that purpose. Some of the other pumps sent to Winsor are held subject to defendants' order.

Q. How many?

(Objected to by plaintiff's counsel as before. Answer received subject to objection, and the question reserved for decision.)

A. Thirty are those held by Winsor, and three of those sent to Petrolia are held subject to our order, or rather they are on consignment. They were so shipped on consignment, to be paid for when sold. They are included in the seven that I testified to this morning. No other of these pumps than these three were sent originally on an agreement for consignment. The pumps sent on November 22d (15), December

183 26th (12), 1872, and January 3d 1872 (7), were sent by us on our own responsibility. They were shipped by us on our own

account, without order. The thirty which I said are held by Winsor, unsold, are part of the 34 just spoken of as shipped by us without order. The others sent to Winsor are all sold or returned.

The dates given in my testimony generally indicate the date we sent the goods from our manufactory to the railroad. The dates given in my testimony are the dates the goods left our hands. We have not, to my recollection, made or sold, since the 8th of August, 1871, any gas pumps except those testified to by me as above. The two or three pumps returned to us which were not destroyed might have been shipped back. We have a few on hand now, and these two or three may be among them. I cannot state whether any of the pumps returned to us have ever been reshipped to any one. If they have been shipped they would be included in the statement that I have already given of pumps shipped.

(Counsel reserves the right of introducing written orders for pumps which the witness has spoken of.)

184 Cross-examined by Mr. PERKINS:

The list furnished by me shows all the pumps sold by us from August 8th, 1871, to the present time, to the best of my recollection. I obtained it from our books, and it is correct, to the best of my belief. This list does not show all the pumps manufactured by defendants during that time. I don't know how many we have manufactured that are not on this list. I cannot make any estimate. There would not be more than a dozen. Whatever there are are now on hand at our factory. There may not be that number; it is mere guess work. They have not been sold, or contracted to be sold. They are not used by us for any purpose. I can state how many gas pumps we had delivered from our shops before August 8th, 1871.

Q. How many?

(Objected to by counsel for defendants as immaterial.

Question admitted as the other, subject to further decision, reserving my decision, and subject to the objection.

A Thirty-seven (37). This number is also obtained from our books; these left our shops prior to that day. These had all been shipped
185 by railroad, from Seneca Falls, prior to that day. They had all been shipped to Winsor Bros., at Petroleum Centre. We were then shipping the pumps as soon as we got them complete, ready for use. Winsor Bros. were not our agents. They bought from us. We had orders for these machines from Winsor Bros. before August 8th, 1871. The orders were both specific for so many machines, and also general orders for so many as we could send. We had both kinds. Winsor Bros. sold our pumps to other parties. We shipped pumps both to Winsor Bros., and also to the parties they designated—both ways. I can't recollect how it was as to these 37, in both manners I suppose. The terms of sale to Winsor Bros. were cash. Cash sometimes meant 30 days, and sometimes not; sometimes we got a note for them. I can't tell whether Winsor Bros. paid for these pumps before they got paid for them.

Q. When did you receive your pay from Winsor Bros. for the 37 pumps?

(Objected to by defendants' counsel. Same ruling as before; if not connected, to be struck out.)

A. I couldn't answer that now, not having any memoranda. The pumps were delivered to Winsor Bros., at the depot at Seneca
186 Falls. I suppose Mr. Winsor paid the freight; we did not.

These 37 pumps were charged on our books at 3 different dates, all prior to August 8th, 1871. I can give the dates, viz: July 18th, 1871, 19 pumps, which includes 1 sent before; July 24th, 6 pumps, and August 1st, 12 pumps. These charges were made on those days. For all these pumps we had Winsor Bros.' orders.

The 33 pumps manufactured prior to August 8th, 1871, and delivered after that day, were in our shop on that day, and were delivered at the various dates subsequent in August, as stated on my list.

Twenty-five pumps delivered to Winsor were afterwards returned. These pumps appear on the list of pumps delivered. They were not among those delivered prior to August 8th, 1871. We received these pumps back. We credited Winsor with these pumps for as much as we had charged him. They were returned because they were defective—made wrong—they had not been made according to Mr. Winsor's directions.

On November 22d, December 26th, 1872, and January 3d, 1873, we sent Winsor in all 34 pumps. We charged Mr. Winsor's account with these pumps when they were delivered. We sent them without
187 any orders. They still stand charged to his account on our books. He received them, and they are now in Pennsylvania, for anything I know to the contrary. We have not got them. The pumps sent to Winsor, or Winsor Bros., have been charged to him, or them, on the day of their delivery at Seneca Falls, or within a day or two of that time. The Winsors have never paid for pumps until they have been delivered at the Seneca Falls station. They are not liable to us for the pumps until we deliver the pumps.

The three pumps now in Petrolia were ordered to be paid for when sold. These are the three I said were sent on consignment. They stand charged on our books to some person, Rebig Hine is his name. They are now in Canada, as I understand. Mr. Hine has a right to sell them.

Redirect by Mr. CRITTENDEN.

The 10 or 12 pumps at our shops, at Seneca Falls, are in different rooms in our shop; some up stairs, some down stairs. Some are painted, I don't know of any not painted. In these 10 or 12 I include the 3 received back from Winsor, which were not broken up. They are not all in fit condition for sale.

188 (Counsel for plaintiff avers that he does not claim for these 10 or 12 pumps now on hand.)

I can't just now state how long previous to August 8th, 1871, we received the order for the 37 pumps delivered prior to that day. I think I can produce the order. The entries for these 37 pumps was made on our books at the date, they were shipped; not made afterwards, and dated back. I don't know as there is anything on our books indicating the pumps sent on commission, or what pumps were sent on commission. I think the 37 pumps spoken of were sent on both verbal and on written orders. Think I can produce the written orders for them. After an order is received, it takes towards a month to get the pumps ordered manufactured ready for delivery. I don't recollect anything about the time when the order was given for the pumps shipped August 1st, 1871, nor of the other two shipments prior to that. The goods charged to Winsor were sometimes directed by us to third persons, and were sent to other parties by his order; but all charged to Winsor, or Winsor Bros.

189 The mode of payment, whether by cash or note, has not been a matter of agreement between us and Winsor. The single pump sent by express was sent July 4th, 1871, and is included in the charge of 19 on July 18th, 1871. That was pursuant to an order. It was a sample pump; can't say whether that order was given at Seneca Falls. The defect on the 25 pumps returned was that they were, some of them, too short; they were not usable as a perfect manufacture. Nothing on the books indicate that the 34 pumps spoken of were consigned. I suppose Mr. Winsor still resides at Petroleum Centre. He is now absent; he is now in Virginia; he has been absent 2 or 3 months, I think.

Q. When did you receive notice that these 30 pumps were subject to your order?

(Objected to as before by Mr. Perkins. Same ruling as before.)

A. I can't tell the date; it was some time before he left Petroleum Centre; it was a year ago; I think it must have been. It was prior to January 1st, 1874.

(Counsel reserves right to introduce writings.)

I have not received pay for the 34.

190 (The last was objected to and received subject to the objection as before.)

The three sent to Petrolia were sent on the agreement that they were to be paid for when sold. I think we have Hine's written order for these three. I think I can produce it. They were all we sent to Petrolia, on commission or conditional order.

Recross:

The 34 pumps sent on commission to Winsor still stand charged to Winsor; he is not our agent; we send goods to Winsor, and he has a right to sell them to whom he pleases, and get his pay as he can.

Redirect:

Q. How long after the shipment of these 34 did you receive the notice that the 30 pumps stood subject to your order?

(Objected to as before by Mr. Perkins. Ruling as before.)

A. We received a notice soon after; can't tell whether we got distinct notices after each shipment.

Recross:

Winsor since made a general statement that he has 30 pumps on hand. I don't know when he received those 30 pumps that he still has on hand. We were informed that he had 30 on hand very near a year ago.

191 Redirect:

Q. Has Mr. Winsor paid you for all the pumps other than these three last shipments—34?

(Objected to by Mr. Perkins. Answer received subject to objection, and Mr. Perkins excepts.)

A. They were all paid for. The notice spoken of was given to us in connection with an accounting for the rest of the pumps.

PHILO COWING.

Adjourned to April 13th, 1874, at 10 a. m.

MONDAY, *April 13th*, at 10 a. m.

Parties met as before. The defendants by Mr. Murray, their counsel.

PLAINTIFF'S CASE.

JAMES H. GOULD sworn for plaintiff and examined by Mr. Perkins:

I am treasurer of the plaintiff; its business is manufacturing iron pumps and other iron goods, at Seneca Falls, N. Y. It has been so engaged since 1862; part of the time prior to 1869 and 1870, under another name. Our shops and saleroom are in the same village with the defendants. We have a large manufactory; we have been en-
192 gaged since August, 1871, and for some months prior to that, in the manufacturing of gas pumps, such as described in the letters patent issued to the plaintiff, and set out in the bill of complaint in this case; the same sort as have been manufactured by the defendants. We have sold a large number of those pumps during that period—about 700 in all—that is, since we commenced making any. During all that time we have been provided with the machinery and appliances necessary to the manufacturing of these pumps in large numbers. We could have manufactured 400 more such pumps during the time since August, 1871. We could have made them if we had had the orders. We would have needed no additional shops and capital in order to manufacture such pumps.

(The above two last answers are taken subject to an objection by defendants' counsel that they are immaterial. I think they are, but do not finally pass upon them.)

I heard Mr. Cowing's evidence on this examination. I know one of the Messrs. Winsor spoken of by him. They carried on the business of selling pumps at Petroleum Centre, Pennsylvania. We formally sold gas pumps to them, and then they stopped buying of us and com-
193 menced giving orders to defendants. Since August, 1871, we have had an agent for the selling of our pumps at Titusville, Pennsylvania. That is a very short distance from Petroleum Centre—12 or 15 miles, I believe. The principal sale of gas-pumps is in the oil regions in Pennsylvania. Both Petroleum Center and Titusville are in the center of what are known as the oil regions in Pennsylvania. We arranged it to obtain orders coming from various parts of the oil regions of Pennsylvania. We had an agent for the sale of these pumps at Petrolia, Canada; we had orders for gas-pumps from that place. Since August, 1871, those which we sent to Pennsylvania we sold at the following rates: 14-inch pumps at $125, less 35 per cent. discount; that is the discount allowed our agent. Those sent to Canada, same size, at $125, less 25 or 30 per cent. discount. We charge the machines to the agent at these figures, taking off the discount mentioned. The 12-inch pumps we sell at $110, subject to the same discount. We have made few of these 12-inch pumps since August, 1871, those sold in Canada; the price given is in U. S. currency. Of all the pumps we sold since August, 1871, I should say one-fourth were 12-inch pumps, but this is not stated positively; it is simply my best recollection, not stated as a fact. We do not pay the freight charges on gas pumps sold by
194 us. I think we charge cartage to the station in Seneca Falls; we don't pay it there.

I have computed the entire cost of manufacturing gas-pumps as manufactured in our shops since August 8, 1871. In making this computation, I have estimated the items of material and labor. These are all the items which enter into the cost of a pump—the material and the labor.

Q. State what the cost has been of manufacturing gas pumps at your shop since August, 1871.

(Objected to by defendants' counsel: (1.) It is not the proper way to prove plaintiff's damages. (2.) The evidence of witness shows his incompetency to answer that question, from the statement he has made as to the basis upon which he makes the estimate. (3.) The question is immaterial.

The answer taken, subject to the objection. The decision is postponed.)

A. The 14-inch gas-pumps cost $33.54; the 12-inch gas-pumps cost $27.06.

JAMES H. GOULD.

Adjourned to Wednesday, 22d of April, at 10 o'clock.

WEDNESDAY, *April 22d.*

Parties met as before. Plaintiff represented by Mr. Perkins;
195 defendant represented by Judge Foote and Mr. J. B. Murray, of Seneca Falls.

Examination by defendant:

The defendants renew the objection made to the last question put to the plaintiff's witness at the last day's examination, and which was reserved.

Mr. MURRAY objects: (1.) That the question and testimony is too indefinite. (2.) The rule of damages assumed by plaintiff is not the correct one. The plaintiff is not entitled to the difference between the cost and price of plaintiff's pump; claims that the measure of damage is the difference between the cost and selling price of the pump the defendants manufacture and sell. (3.) The basis upon which the witness swore to the damages is too indefinite; he didn't put in but two items in the cost of a pump; claims that there are other items.

Mr. Murray adds that under the first head of objection he means that Mr. Gould's testimony does not show what part of the pump is patented.

JUDGE FOOTE adds, on same side, plaintiff has suffered no damage; plaintiff might have made other pumps as well; and also that plaintiff's pump and defendants' pump are not shown to be the same.

196 Mr. PERKINS, in reply. No proof before the master that there are any other pumps, &c.; 2d, argues that plaintiff has a right to recover the profits on the whole machine.

Judge FOOTE, in reply, refers to the testimony in the case, and says it is to be regarded as in evidence.

The master decides and holds:

1st. That the objection to the questions put to and answers made by Mr. Gould, referred to above, on the ground that they are too indefinite in that they do not show that he has included sufficient items in his computation to make the basis thereof, and that he has shown himself incompetent to make a computation and estimate of it, is overruled, on the ground that the question and answer are not incompetent on these points, but defendants must, if they desire, make the matter more definite and certain by cross-examination.

2d. That the objection that the pumps made and sold by defendants is not shown to be the same as that made and sold by the plaintiff, and that the plaintiff cannot have suffered damage by defendants making and selling such pumps, because it can be shown that there were
197 other pumps in the market which could be made and sold at the same or greater profit is overruled, on the ground that such ob-

jection goes behind the decree in this cause, and would open it again. I hold that no evidence of the sort could be introduced by defendants.

3d. The objection as to the proper measure of damages, viz, whether plaintiff is entitled to recover the profit made on the making and vending of the entire pump, or only that part of the same referable to the patented portion of the entire pump, I receive for further consideration.

(The defendants' counsel except to this ruling.)

Mr. PHILO COWING recalled for defendants, and examined by Judge Foote.

Question by Mr. FOOTE:

Q. At the time you made the gas pumps mentioned in the bill of complaint in this case, were there other gas pumps, without the plaintiff's supposed improvements, that the defendants had a right to make, and that were open to the public, and that were adequate to enable the *the* defendants to obtain an equally beneficial result as that obtained by the complainant's supposed improvements, and, if so, state what such

198 other pumps were, and where any advantage was obtained by making or selling the pumps mentioned in the bill of complaint over and above that which would have been derived by making some or any of such first-mentioned pumps?

Question objected to by plaintiff's counsel as immaterial.

The objection is sustained on the ground stated above, that the question goes behind the decree in this case, and the defendants' counsel excepts to this ruling.

It is agreed that the pleadings and proofs are to be taken as in evidence before me. It is in the case that the plaintiff's pumps were properly stamped, and that the plaintiff gave notice to the defendant.

Defendants rest.

199 (Endorsed:) U. S. circuit court. The Gould Manufacturing Co. vs. John P. Cowing and others. Testimony. Filed Dec. 19, 1877.

200 EX. I, C. M.—EXHIBIT A.

1.	1 day's work vitr'oling, cleaning, and chipping castings	1 75
2.	Fitting up plunger and cross-head	4 50
3.	Do. do. cylinder and base	4 50
4.	Do. do. valve boxes	1 75
5.	Boreing out cylinder	1 00
6.	Polishing cylinder, including blocks	1 00
7.	Machine work, fitting up bolts and lower straps	44
8.	Stuffing box packing	10
9.	Cutting leather for the valves	10
10.	2 sheets bonnett board	20
11.	Leather for the valves	40
12.	Forging springs	75
13.	2 pounds steel for the same	40
14.	Forging bolts	80
15.	Iron for the same	77
16.	Nuts for bolts	1 40
17.	10 pounds bronze valves, @ 60c	6 00
18.	Turning up the valves	40
19.	761 pounds iron castings	19 02
20.	Planing the cylinder	50

21.	Moulding the cylinder	2 00
22.	Do. the trimmings	3 00
23.	25 pounds piston rod, @ 6½c	1 62
24.	¾ day's work on the same	1 88
	Painting, striping, and varnishing	1 00
201	25. 10 pounds malleable straps, 15c	1 50
	26. Plunger screws and studs	57
27.	Forging walking-beam straps, including the iron	2 50
28.	6 pounds flanges, suction and discharge, 2½	15
29.	Work on same	32
30.	2 large corks, @ 5c	10
31.	2 small do. @ 1c	02
32.	Labor making cores including materials	1 25
		61 69
	Sundry expenses in manufacture	18 00
		$79 69

30% sundry expenses in manufacturing.

7% on $250,000 investment	17,500 00
Rent of works	2,000 00
Do. New York store	4,500 00
Clerk hire, New York	4,500 00
Insurance	1,200 00
Office help & foreman S. Falls	4,800 00
Local taxes S. F., N. Y., & K. C	1,200 00

Freight & expressage.
Oils.
Coal and charcoal.
Moulding sand.
Core sand.
Agent's salaries & expenses.
202 Pattern-maker's wages.
Watchmen.
Telegraphing.
Postage.
Stationery.
Catalogues.
Advertising.
Bank discounts.
Cast steel for tools.
Fire brick & clay.
Grindstones.
Emery wheels.
Files.
Drills.
Taps & dies.
Belting.
Rosin.
Flour.
Loss in melting in brass foundry.
" " " " iron " 10%.
Shipping tags.
Rattle boxes and lumber.
Flasks & lumber.

Oil of vitriol.
Merchantile agencies.
Gas bills.
Brooms.
Brushes.
203 Shovels.
Riddles.
Stevedoring.
Waste in cutting iron & pipe.
Wood engraving.
Electrotypes.
Wear of machinery.
Waste in cutting leather.
Repairs on building.
Glue.
Shellack.
Alcohol.
Nails & screws.
Brads.
Expenses on water privilege.
Wood for cupola.
Deductions for breakage and various claims allowed in settlement of a/cs.
Loss in bad castings.
Breakage in manufacture.

(Endorsed:) Filed Dec. 19, 1877.

204 PL'FF'S EX. H, C. M.—EXHIBIT B.

7,140 lbs. castings cleaned ready for machinist	3c.		214 20
84 lbs. bronze castings finished	30c.		25 0
66 lbs. malleable castings	10½		6 93
Labor making piston rods			3 75
5 days' labor	1 50		7 50
4 " "	1 75		7 00
37½ " "	2 25		84 37
Bolts	15 41		15 41
Studs			3 60
300 lbs. piston rods	@ 4c.		12 00
Stirrups or beam straps			3 80
Forging for 12 pumps 24 h'rs	@ 50c.		12 00
Painting			6 00
Spring steel			75
		12)	$402 51
Cost of one pump			$33 54

205 (Endorsed:) Filed Dec. 19, 1877.

206 U. S. circuit court nor. dist. of N. York.

Mr. Perkins for com.

THE GOULDS' MANUF'G COMPANY
vs.
JOHN P. COWING ET AL.

Mr. Foote for def't.

JOHNSON, J.:

This case comes up on exceptions, taken by the defendants, to the report of the master under the interlocutory decree, directing an account upon the infringement of the plaintiff's patent. This decree was made in March, 1874, Judge Woodruff presiding. Under it an account was taken before Mr. Pomeroy, acting as master. Upon his report exceptions were taken by the defendants, which were heard before Mr. Justice Hunt. The learned judge allowed the exceptions, and, in the first instance, ordered that the plaintiffs were entitled only to nominal damages, but subsequently allowed the plaintiffs a further opportunity to produce evidence. Upon the decision of the case an elaborate opinion was delivered, which is to be found in 12 Blatchford's Reports, 343.

It was held that the invention was one only of an improvement
207 in the pump, and not of the entire pump. Numerous parts of the pump were in general use prior to the patent, and were not claimed therein, and were free to be used by the defendants. The patented invention claimed was a special construction of a side chamber, whereby the same was adapted to use with the valve casings bolted on the outside, and the damages could not exceed the profits upon such improvement. It was further held that, as the plaintiff failed to show the profits or damages arising from the use of the improvement, the master should have decided that nominal damages only could be recovered. This decision furnishes the law of this circuit upon the questions involved, and, in an especial sense, it furnishes the law of this case, which no judge has a right to review or modify, except upon appeal. Being convinced of its correctness, I have as little inclination as I have right to depart from it. Upon the further reference, the report upon which is now before the court on exceptions taken by the defendant, the clerk of this court, acting as master, has made substantially the same report as was made by the first master, founding his decis-
208 ion upon proof that, after the plaintiff's pump had been introduced into certain oil regions, other pumps could not be sold in those regions. This is relied upon as taking from the former decision all its force, and absolving the party from the necessity of giving proof, as that decision holds, of the profits or damages arising from the use of the improvement. The force of the former decision cannot thus be avoided. The fact newly introduced has no bearing upon the question, but leaves the rule announced in the former decision of Mr. Justice Hunt uncomplied with. The attempt to get rid of that decision in this way must necessarily fail. To a court which has decided that evidence of a particular fact is necessary, it is no answer to say that it cannot be given. The consequence of that state of things is that the party on whom the burthen rests must fail. This is the situation of the plaintiffs in the case before the court. They have not given the evidence which the court has held they must give to entitle them to more than nominal damages. It must be attributed to the impossibility of proving any damages within the rule laid down by the court. The exceptions

209 must be allowed, and the report reduced to nominal damages, and there must be a final decree on that basis. If the views of the plaintiff are to prevail, the only remedy is in the Supreme Court, upon appeal. To the decision of Mr. Justice Hunt heretofore made in this cause is now to be added the decision of the same learned judge, made in this court, in Black, adm'r, vs. Munson, filed June 19, 1877, in which the same doctrine laid down by him in this case is reaffirmed and applied to the circumstances of Black vs. Munson.

Let there be a decree for the plaintiffs with nominal damages only.

(Endorsed:) U. S. cir. court, north. dist. of N. Y. Goulds' Man'f'g Co. vs. Cowing et al. Opinion for def't on exceptions, &c. Johnson, J. Filed Sep. 14, 1877.

210 To the honorable Alexander S. Johnson, judge of the circuit court of the United States for the second circuit:

The petition of the Goulds' Manufacturing Company, a corporation organized under and by virtue of the laws of the State of New York, respectfully shows:

That on the 7th day of November, 1877, in a certain action in equity pending in the circuit court for the northern district of New York, in which your petitioner was complainant and John P. Cowing, George Cowing, and Philo Cowing were defendants, wherein the said complainant sought to enjoin the infringement by said defendants of certain letters patent issued to the complainant as assignee of William H. Pollard for an improvement in gas-pumps, dated August 8, 1871, and to recover damages for said infringement, a final decree was rendered whereby it was adjudged that the defendants infringed your petitioner's rights under said patent, but whereby said complainant recovered from said defendants only the sum of six cents as and for its damages, the said last-mentioned portion of which decree your petitioner claims was error as against its right to recover the sum of $13,845.08 as and for its damages, as by it demanded.

Wherefore your petitioner prays your honor to allow an appeal from said circuit court to the Supreme Court of the United States for the correction of said error.

Dated November 15, 1877.

THE GOULDS' MANUFACTURING COMPANY,
By W. F. COGSWELL, *Its Attorney.*

The appeal herein is allowed, with citation to issue on filing bond for the amount of two hundred & fifty dollars as approved.

Nov. 21, '77.

ALEX'R S. JOHNSON,
U. S. Cir. Judge.

211 Filed Nov. 23, 1877.

212 Know all men by these presents, that we, James H. Gould and Seabury S. Gould, junior, of Seneca Falls, State of New York, are held and firmly bound unto John P. Cowing, George Cowing, and Philo Cowing in the sum of two hundred and fifty dollars, to be paid unto the said John P. Cowing, George Cowing, and Philo Cowing, or their certain attorney, executors, administrators, or assigns; for which payment, well and truly to be made, we bind ourselves, our heirs, executors, and administrators, jointly and severally, firmly by these pres-

ents. Sealed with our seals and dated this 16th day of November, 1877.

Whereas the Goulds' Manufacturing Company, of Seneca Falls, New York, is about to prosecute an appeal to the Supreme Court of the United States to reverse a portion of judgment rendered by the circuit court of the United States for the northern district of New York in a certain action wherein the Goulds' Manufacturing Company was complainant and the said Cowings were defendants:

Now, therefore, the condition of this obligation is such that if the said Goulds' Manufacturing Company shall prosecute its appeal to effect, and answer all damages and costs if it fail to make its plea good,
213 then this obligation shall be void, otherwise it shall be and remain in full force and virtue.

JAMES H. GOULD. [L. S.]
SEABURY S. GOULD, JR. [L. S.]

STATE OF NEW YORK,
Seneca County, ss:

On this 16th day of November, 1877, personally appeared before me James H. Gould and Seabury S. Gould, jr., to me known to be the same persons described in, and who executed, the above instrument, and severally acknowledged that they executed the same.

[L. S.] NORMAN H. BECKER,
Notary Public in and for Seneca County, N. Y.

STATE OF NEW YORK,
Seneca County, ss:

James H. Gould and Seabury S. Gould, jr., being duly and severally sworn, each for himself, says he is a resident and freeholder of the county of Seneca and State of New York; that he is worth in property not exempt from levy and sale on execution the sum of $500 over and above all debts and liabilities which he owes or has incurred.

214 JAMES H. GOULD.
SEABURY S. GOULD, JR.

Sworn to before me Nov. 16, 1877.

NORMAN H. BECKER,
Notary Public in for Seneca County, N. Y.

215 (Endorsed:) Bond on appeal. Filed Nov. 23, 1877.
I hereby approve the within bond in form and sufficiency, Nov. 21, '77.

ALEX'R S. JOHNSON,
Cir. Judge.

216 The United States of America to John P. Cowing, George Cowing, and Philo Cowing, greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States to be holden at Washington on the second Monday of October next, pursuant to a petition of appeal filed in the clerk's office of the circuit court of the United States for the northern district of New York, wherein the Goulds' Manufacturing Company is appellant and you are appellees, to show cause, if any there be, why the final decree in the said petition of appeal mentioned should not be corrected, and why speedy justice should not be done to the parties in that behalf.

Witness the honorable Alexander S. Johnson, judge of the circuit court of the United States for the northern district of New York, at the city of Utica, this 24th day of November, in the year of our Lord one thousand eight hundred and seventy-seven.

ALEX'R S. JOHNSON,
Cir. Judge.

217 On this first day of December, in the year of our Lord one thousand eight hundred and seventy-seven, personally appeared before me, the subscriber, W. B. Henion, and makes oath that he delivered a true copy of the within citation to John P. Cowing Philo Cowing personally, at Seneca Falls, New York, on Dec'r 1st, 1877, & that he knew the parties so served to be those herein named.

W. B. HENION.

Sworn to and subscribed the 1st day of Dec'r, A. D. 1877.

CORNELIUS S. HOOD,
Notary Public in and for Seneca County.

(Indorsed:) U. S. circuit court, north. dist. of N. Y. In equity. The Goulds' Manufacturing Company vs. John P. Cowing et al. Citation.

Due service of a copy of the within is admitted.
Dec. 15th, 1877.

DE L. CRITTENDEN,
Def'ts' Att'y.

Filed Dec. 17, 1877.

218 UNITED STATES OF AMERICA,
Northern District of New York, ss:

I, Charles Mason, clerk of the circuit court of the United States of America for the northern district of New York, do hereby certify that I have compared the writings annexed to this certificate, and they are true copies of their respective originals, and are correct transcripts therefrom, now on file and remaining of record in my office, being a full and complete copy of so much of the record and proceedings in the suit of the Goulds' Manufacturing Company vs. John P. Cowing, George Cowing, and Philo Cowing as is on file and remaining of record in my office.

In testimony whereof I have hereunto set my hand and duly affixed the seal of the said court, at the city of Utica, in said district, this 30th day of August, A. D. 1878.

[SEAL.] CHARLES MASON, *Clerk.*

(Indorsement on cover:) No. 151. The Goulds' Manufacturing Company, appellant, vs. John P. Cowing, George Cowing, & Philo Cowing. N. New York C. C. U. S. Filed 2nd January, 1879.

117925.

3 UNITED STATES PATENT OFFICE.

William H. Pollard, of Seneca Falls, New York, assignor to the Goulds Manufacturing Company, of same place. Improvement in gas-pumps.

Specification forming part of letters patent No. 117925, dated August 8, 1871.

To all whom it may concern:

Be it known that I, William H. Pollard, of Seneca Falls, in the county of Seneca and State of New York, have invented a certain new and useful improvement in gas-pumps for oil-wells; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing, in which—

Figure 1 represents a perspective view of my improved pump with a portion of the side chamber broken away and with one of the valve-casings removed from place; Figs. 2 and 3, detail views.

Like letters of reference indicate corresponding parts in all the figures.

This improvement is applicable to any ordinary use where a double-acting pump is required, but it is specially designed for drawing off the gas from the casing of oil-wells and conducting the same to the furnace of the engine. For this purpose it is necessary to have tight joints to the pump; and the invention consists in the construction of the side chamber of the cylinder and the valve-casing, as hereinafter described, with this special purpose in view.

In the drawing, A represents the base of the pump; B, the cylinder; C, the cap or top of the pump; and D, the piston. These parts, in general arrangement, are the same as those in use in ordinary double-acting pumps. On one side of the cylinder is cast a chamber, E, extending from top to bottom. This chamber is divided longitudinally by a partition, *a*, which thus forms two longitudinal passages, *b b*, which have no direct communication with each other or with the cylinder. Lateral ports *c c* are made in the sides of these passages for the connection of the pipes which extend to the well and to the furnace. These passages *b b* do not open at top and bottom into the interior of the cylinder, as in ordinary double-acting pumps, but open outward by ports *d d* and thus communicate with similar ports d^1 d^1 of the valve-casings F, the construction of which will presently be described. By this arrangement the passages *b b* are made to communicate with a valve-casing bolted outside the pump, which is a distinguishing feature of my invention. Two of the valve-casings F F are used, one at the top and one at the bottom, and they are simply bolted tightly in place against the plane-seats *f f*, with only a packing between. These valve-casings are each cast in a single piece, and, besides the ports d^1 d^1, before spoken of, have a central port, d^2, which communicates with the interior of the cylinder by a similar port, d^3, formed in the latter. These ports are shut off from the passages *b b*, and the gas from the latter can reach them only by making the circuit through the hollow valve-casings. The valve-casings are each cast hollow and provided with seats *g g*, on which strike the valves *h h*. The ports d^1 d^1, which open from the passages *b b*, open one over and the other under the

valves *h h*, so as to produce a reverse action as the piston goes up and down; and the open spaces *i i*, above and below said valves, respectively, connect directly with a central space which forms a continuation of the central port d^2. This construction (which is clearly shown in Fig. 2.) consists simply of a web, which is cast entire in the hollow valve-casing, thereby allowing the free reverse action of the valves without any of the loose or open joints that occur where the valve-casing is made up of several separate and detached parts. In this improved construction there is but one joint to each end of the pump, and that is at the junction of the valve-casing with the seat *f*; all else, both of the side chamber and the valves, is inclosed by a solid construction; and hence there can be no essential escape of the volatile gas as it passes through. The special construction of the valve-casings to produce this result I believe to be new. The stems of the valves *h h* rest in screw-sockets *l l* in the usual manner.

I am aware that it is common to cast a side chamber to a double-acting pump to allow the medium to follow the action of the plunger. Such, in its broad sense, I do not claim. I claim only the special construction of my chamber, whereby the same is adapted to use with the valve-casings bolted upon the outside. In this connection the passages *b b* must open outside, while in other pumps they open inside the cylinder. In the same manner I do not claim, broadly, locating the valves in a hollow casing, but only the special construction of the casing described, whereby the same is adapted to be bolted upon the outside of the gas-chamber, thereby making but a single joint at each end of the pump.

It will be noticed that there is not only an alternate action of
4 each pair of valves in a single casing, but also a similar action in each pair situated in line at the top and bottom, thus producing a compound action which keeps up a continuous movement of the gas.

In a gas or air pump it is essential, to get the full stroke of the piston, to leave none of the medium or fluid at either end at the reverse movement.

What I claim as my invention, and desire to secure by letters patent, is—

1. The chamber E, provided with the longitudinal partition *a*, forming distinct and separate passages *b b*, which have side ports *c c* for the attachment of the induction and eduction pipes, and ports *d d* at top and bottom opening outward into the valve-casings, as herein described.

2. The duplex valve-casings F, with the ports d^1 d^1 d^2 opening respectively to the passages in the side chamber and to the cylinder, and provided with the seats *g g* so arranged as to admit the gas or other fluid over one valve and under the other, as herein described.

3. The combination and arrangement, with the cylinder B, of the outside chamber E provided with the seats *f f* of the valve-casings F F bolted thereon, in the manner and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

WM. H. POLLARD.

Witnesses:
CORNELIUS S. HOOD.
R. N. HERBERT.

THE GOULDS MANUFACTURING CO., APPELLANT,
against
JOHN P. COWING, GEORGE COWING, AND PHILO COWING, APPELLEES.

Stipulation.

It having been stipulated by the counsel for the respective parties in the court below that the exhibits in the above-entitled action need not be filed, and the same not having been filed accordingly, and the counsel being desirous to use the plaintiff's patent and specifications upon this argument,

It is hereby stipulated that a copy of the plaintiff's patent and specifications, Exhibit A, and herewith enclosed, be printed and furnished to the court as a part of the record in this action.

Dated September 29, 1881.

W. F. COGSWELL,
Of Counsel for Appellant.
ELISHA FOOTE,
Of Counsel for Appellees.

(Indorsed:) United States Supreme C't. The Goulds Man'f'g Co. against John P. Cowing and others. Stipulation.

(Indorsed:) Supreme Court U. S., 1881. October term. No. 151. The Goulds Manufacturing Co., app'l't, vs. Jno. P. Cowing et al. Stipulation of counsel & addition to record. Filed 8th October, 1881. Office Supreme Court U. S. Filed Oct. 8, 1881. James H. McKenney, clerk.

Supreme Court of the United States.

No. 151.

THE GOULDS MANUFACTURING COMPANY,

Appellant,

vs.

JOHN P. COWING, GEORGE COWING AND PHILO COWING,

Appellees.

BRIEF FOR APPELLANT.

WILLIAM F. COGSWELL, Of Counsel for the Appellant.

SUPREME COURT

OF THE

UNITED STATES.

THE GOULDS MANUFACTURING COMPANY,
Appellant,

against

JOHN P. COWING, GEORGE COWING, AND PHILO COWING,
Appellees.

BRIEF FOR APPELLANT.

History of the Case.

This is an appeal by the plaintiffs from so much of the decree of the Court below as sustained the defendants' exceptions to the Master's report awarding to the plaintiff damages to $13,845.08 and limited the plaintiff to nominal damages.

The Bill was filed in the Circuit Court for the Northern District of New York for an injunction and damages upon a patent issued to the plaintiff as assignor of William H. Pollard, dated August 8, 1871, (No. 117,925,) for an improvement in gas pumps.

The defendants appeared and put in the stereotyped defences. At the March term, 1874, the case was brought on for hearing before the late Judge Woodruff, and a decree passed sustaining the patent, adjudging the defendants infringers, awarding an injunction, and referring it to Mr. Pomeroy as Master to take and state the account of the plaintiff's damages (page 8 of the Record). He

made his report April 24, 1874, awarding the plaintiff $14,217.58 as damages. Exceptions were filed to this report, which were brought to hearing before Mr. Justice Hunt in July, 1874, when the exceptions were allowed, the report set aside, and it was referred to Mr. Mason as Master to state the account of the plaintiff's damages (page 14 of the Record). (Judge Hunt's opinion will be found at page 71 of the Record.)

Mr. Mason made his report February 1, 1876, awarding the plaintiff as damages $13,845.08 (page 18 of the Record). Exceptions were filed to this report, which were brought to hearing in September, 1877, before the late Mr. Justice Johnson, who sustained the exceptions, set aside the report, and ordered a decree for nominal damages only (p. 20 of the Record). Such decree was entered, and from so much of it as relates to the damages the plaintiff has appealed to this Court (see Petition of Appeal, page 89 of the Record). The defendants have not appealed.

Assignment of Error.

There were seven exceptions to the Master's report, four of which were based upon allegations that the evidence did not sustain the findings of fact by the Master; the sixth for that the Master should have overruled and rejected certain evidence. None of these were considered by the Court (see Judge Johnson's opinion, p. 88). These exceptions will not require particular discussion. The fifth and seventh exceptions (pages 19 and 20) are the ones that raise the question in the case and upon which the decision of the Court below was placed (see opinion), although the order and decree recite that the exceptions without special designation were allowed.

The fifth and seventh exceptions are on the ground that the Master erred in adopting as the rule of damages the profits arising from the sale of the whole of plaintiff's pump instead of the particular part thereof covered by its patent.

Explanation of the Record.

In pages 22 to 62, both inclusive, is the testimony on the hearing of the issues raised by the bill, answer, and replication. In pages 63 to 71, inclusive, are the testimony and proceedings before Master Pomeroy. In pages 75 to 78 is the testimony taken before Master Mason; and in pages 78 to 85 near the middle is the testimony taken before Master Pomeroy and read on the hearing before Master Mason. See Stipulation near top of page 78. By Stipulation on page 85 the proofs taken on the original hearing were brought into the case on the hearing before Master Mason.

Subject Matter of the Patent.

The plaintiff's patent is for an improved gas pump, the principal if not the sole use of which is the pumping of gas from oil wells.

The improvement consists in so arranging the parts and form of the pump as to require but two joints, and so reduce the escape of gas to a minimum.

The base cylinder and top of the pump are in general arrangement the same as those in use in ordinary double-acting pumps. Upon the side of the cylinder is cast a chamber divided into two longitudinal passages by a partition cast in the same. These passages have no connection with the cylinder, but have ports upon the sides for connection with the pipes, extending one to the well from which the gas is to be drawn, and the other to the furnace in which it is to be consumed. These passages or chambers have ports opening outward and communicating with like ports in the valve casings, whose planed surfaces are bolted to the planed surfaces of the chamber. These valve casings have a central port which communicates with the cylinder by a port in it. The ports from the longitudinal passages open one over and the other under the valves, and the open spaces above and below the valves connect directly with the central open spaces which form continuations of the central

ports opening into the cylinder. When by the movement of the piston a vacuum is produced in the cylinder, the gas passes through the induction pipe and induction chamber, lifts the induction valve and passes through the central space in the valve box into the cylinder by its connecting port. The motion of the piston being reversed, the gas is expelled through the port into the central space, closes the induction valve, opens the eduction valve and passes out through the eduction chamber and pipe to the place where it is to be used or wasted. Thus it will be seen that the device covered by the plaintiff's patent is a unit; that its essential characteristic is the combination and arrangement of parts to produce a symmetrical whole, and that any change in or omission of parts destroys the device. This not only appears by an inspection of the patent, but is explained in the testimony. Evidence of Mr. Pollard, pages 75, 76.

Utility of the Invention.

It is sufficient to say under this head, and upon the question of damages it is material to say that immediately upon its introduction into the market the plaintiff's pump superseded all other pumps for pumping gas. (Report of Master Mason, page 17. Evidence of Mr. Pollard, page 75.) The market for this kind of pump was limited territorialy to the oil producing region, practically to a small portion of Pennsylvania.

Plaintiff's Damages.

The number of pumps for which the defendants are liable to account was fixed by agreement at 298 (page 75).

The parties were rival manufacturers in a small town in Western New York. The plaintiff had abundant facilities for the manufacture of all the pumps made by the defendants as well as those made by themselves (pages 17 and 75). The defendants boldly pirated the plaintiff's pump without even an attempt at evasion (Pollard's testimony, page 23), went into the market formerly occu-

cupied by the plaintiff and employed its agent to make sales for them. The Master has found that had the defendants not interfered with the plaintiff's market, the plaintiff would have had the whole market to itself, and would have secured orders for the pumps sold by the defendant (page 17).

The Master has also found that the plaintiff sustained damage to the extent of the loss of the sale of two hundred and ninety-eight pumps at a profit of $46 per pump. The testimony of Mr. Pollard, page 47, shows the cost of manufacturing the pumps to be $33.54. The testimony of the defendant Cowing, page 75, shows that the defendant sold the pumps at $80 apiece net.

Argument.

IT IS RESPECTFULLY SUBMITTED THAT THE LEARNED COURT BELOW ERRED IN SUSTAINING THE EXCEPTIONS TO THE MASTER'S REPORT, AND DECREEING THAT THE PLAINTIFF WAS NOT ENTITLED TO MORE THAN NOMINAL DAMAGES.

When one has been injured by the unlawful act of another the law undertakes to make good that injury by allowing him to recover all the damages which he can show that he has sustained. The proposition that the law does not aim at full compensation, but at a division of the loss, is so manifestly illogical that it has been abandoned by Mr. Sedgwick, by whom it was first advanced, in the more recent editions of his work.

Sedgwick on the Measure of Damages, p. 38, note 1.
Griffin vs. Colvin, 16 N. Y., 489, 494.
Allison vs. Chandler, 11 Mich., 542.

But this statement of the law by Mr. Sedgwick was not applied to cases of tort.

Certain rules have been laid down by courts to aid in the accomplishment of this object, but in the nature of things, each case must stand very much upon its own circumstances.

This is eminently true in the case of an infringement of a patent, as has been shown by this court in the case of

Seymour vs. McCormick, 16 Howard, 480.

In that case and in all other cases in this court it is believed the effort has been, on the one hand, to give the plaintiff *all* the damages which he has sustained, and, on the other, to restrict him to such damages.

Thus the plaintiff has been restricted to his license fee where one was clearly established, as in the case cited, and in

Philp vs. Nock, 17 Wall, 460;

to the profit in using the patented process in the manufacture of car wheels of the improved process, instead of the entire profit in the manufacture of the wheels—in other words, the difference between the cost of the old and the new process,

Mowry vs. Whitney, 14 Wall, 620;

to the profit upon the improvement upon a particular machine which was seperable therefrom, especially where the original machine was patented,

Blake vs. Robertson, 94 U. S., 728.

But after all, the question recurs, What damages has the plaintiff shown that he has sustained by the wrongful conduct of the defendant? or, in other words, How much has he *proved* that he would have received by reason of his patent except for the wrong doing of the defendant?

What he has been thus deprived of are his damages, and he has a right to recover them.

Applying these suggestions to the case in hand, the plaintiff was entitled as damages to the profit which it would have made upon each pump sold by the defendants. The special circumstances governing this case and established by the evidence are that this improved pump was a unit although each of the parts of which it was composed was old, and their new and useful combination constituted the pump which was pro-

tected by the patent. The plaintiff had a monopoly of a market very limited in extent, and out of which the plaintiff's patented pump had driven all other devices for the same purpose. The defendants entered into this market and sold to customers of the plaintiff, through the agent of the plaintiff, the pumps the profit upon which the plaintiff seeks to recover.

That profit, upon the finding of the Master upon undisputed evidence, the plaintiff would have received except for the conduct of the defendant.

There is nothing which will make good the injury the plaintiff has suffered except to give it what it would have received, which is the rule adopted by the Master.

The facts of the case bring it within the exception to the general rule laid down by Judge Blatchford in

Garretson vs. Clarke, 15 Blatchford, 70,

that the plaintiff must show, where the patent is for an improvement in a machine, in order to recover the profits on the machine, that the entire value of the machine as a marketable article is properly and legally attributable to the patented feature.

See also

Ruggles vs. Eddy et al., 12 Off. Gaz., 716.

The question in this case was involved and necessarily decided by this Court in

Parks vs. Booth, reported in 102 U. S., p. 96,

although nothing is said about it in the opinion. It was the case of an improvement in grain separators. The Master had given to the plaintiff the profits on the machine as an entirety. The counsel for the appellants devoted about five pages of his brief to the exception to the Master's report on that subject, citing all the cases which have been cited in this, including the case now before the Court. The counsel for the respondent argued then as now that the patented machine was an entirety and not a separable improvement, as the seat in the McCormick case, nor an improvement in a process, as in

Mowry against Whitney; that the machine was a unit and made and sold as such; that the evidence showed that there was no other machine in the market which would answer the purpose of the plaintiff's machine. The decree of the Court below overruling the exceptions to the Master's report, so far as relates to this question, was affirmed.

I have incidentally referred to the evidence which sustains the first four findings of fact of the Master. It sustains the findings fully.

As to the fifth exception, raising the question of the correctness of the ruling by the Master, the first answer is that the Master has made no ruling. The evidence of Cowing and Gould, in which the objections arise, from pages 78 to 85 inclusive, was read from the testimony reported by Master Pomeroy, and the Master whose report is under consideration was not asked to make any ruling. This appears by comparing the pages referred to with pages 67 to 71 of the Record.

Again, the exception is to the Master's ruling in admitting evidence, and neither Master received any evidence as to which a question could be fairly raised. Finally, if the Court had thought there was error in rulings upon evidence it would only have sustained the exceptions and sent the case back to the Master, and would not have decreed that the plaintiff was entitled to nominal damages only.

I respectfully submit that so much of the decree of the Circuit Court as sustains the exceptions to the Master's report and decrees to it nominal damages only, should be reversed, and that the plaintiff should have a decree for the damages allowed by the Master ($13,845.08), with costs.

WILLIAM F. COGSWELL,

Of Counsel for the Appellant.

IN SUPREME COURT OF THE UNITED STATES.

No. 151.

THE GOULDS' MANUFACTURING COMPANY,

Complainant and Appellant,

vs.

JOHN P. COWING, AND OTHERS,

Appellees.

BRIEF FOR DEFENDANTS.

ELISHA FOOTE

of Counsel for Defendants.

IN SUPREME COURT OF THE UNITED STATES.

No. 151.

THE GOULDS' MANUFACTURING COMPANY,
Complainant and Appellant,

vs.

JOHN P. COWING, AND OTHERS,
Appellees.

BRIEF FOR DEFENDANTS

Statement of the Case:

The complainant obtained a decree in March, 1874, directing among other things a reference to ascertain the profits derived from an infringement of the complainant's patent for an "improvement in making pumps."

The Master, instead of investigating the advantages in the manufacture of pumps of the complainant's supposed improvement as claimed in the patent, reported the whole profits of the complainant in making their pumps, and that even without any allowance for the expenses of selling, bad debts, use of machinery, clerk hire, agents, power to drive the machinery, rent of buildings, capital, and other expenses and losses incident to the business.

From the amounts for which the pumps were sold, he deducted the expenses of labor and materials used in their manufacture, and found the balance to be the profits the complainant was entitled to recover.

Exceptions were taken, and on hearing before Mr. Justice Hunt, hold-

ing the Circuit, the report was set aside. The patent was fully considered, and the proper measure of damages defined with great clearness. It was held that the complainant was not entitled to recover for the whole profits of pump making, but only for the advantages in such manufacture of the complainant's alleged improvement. (The decision may be found 12, Blatchford's Rep. 343; also Record p. 71.)

The Court decided in the first instance, that the complainant was entitled to recover nominal damages only, but subsequently on the application of the complainant's counsel, a second reference was allowed to give the complainant another opportunity to produce evidence (if any could be produced,) touching the only proper question referred to the Master.

The second reference was substantially a repetition of the first. The instructions of the Court were disregarded. No testimony was offered by the complainant regarding the nature, advantages, or profits of the supposed improvement claimed in the patent. But instead thereof the complainant proved by the inventor (Record 73, fol. 170, 171): "It is utterly impossible for me to give the profits from the manufacture and sale of any particular part of this pump—the profits arise from the sale of the whole pump. * * * I think it would be impossible for anyone to ascertain the profits arising from the manufacture of any particular part of these pumps—I mean to say it would be impossible to ascertain the profits arising from the manufacture of any one or more of the parts less than the whole."

The second report was set aside on the hearing of exceptions before the Hon. A. S. Johnson, Circuit Judge, and a decree was entered for the complainant, for costs and six cents damages. The opinion of the Circuit Judge is annexed to the Record p. 88.

The only point in the case is whether the decision of Mr. Justice Hunt, and the subsequent one of Judge Johnson in respect to the proper measure of damages were right.

The testimony above quoted, of the complainant on the second reference, was given after the following remarks were made by Mr. Justice Hunt in his decision of the case.

"The proposition," he says, "is simply this, the patentee takes the well known portions of a pump used in pumping gas oil, with passages, valves, piston, chambers, openings &c., as already made and used, adds a chamber of an improved construction, as it is alleged, and in combination with certain parts described. Now if this addition is not a new and useful improvement, no damages can be claimed for its use. If it is such an improvement, the improvement in its nature and by law is and must be

capable of being described and pointed out, and must be described and pointed out. Every skillful mechanic must be able to learn from the patent itself precisely what the monopoly covers (Patent Act. 1870, § 26). If this alleged improvement is so confounded with portions of the machine which are the subjects of other patents, or which from long continued use are open to the public that it cannot be separated from them, or if, when so separated it has no value, it is not a patentable invention, and no damages are due for its use.'

It may be safely inferred that after such a decision, if the complainant's patent had any distinctive feature of any practical advantage, it would have been shown on such 2d reference.

The difficulties that the complainant encountered in complying with the decision of the Court, and the impossibility of pointing out any part or feature of the complainant's pump from which any benefits were derived, or profits could be estimated will appear from an

EXAMINATION OF THE PATENT.

Pumps both single and double-acting are very old devices. The patentee nowhere professes in his patent to have invented either. "In the drawing, A," he says, "represents the base of the pump, B the cylinder, C the cap or top of the pump and D the piston. These parts in general arrangement are the same as those in use in ordinary double-acting pumps." But what he supposed he was the first to invent (and I doubt not in perfect good faith), is what is termed the *valve boxes*, and sometimes *valve casings*. A part of the passages to and from the the cylinder is usually cast on the cylinder, and this is termed the *side chamber*. The valves are placed in these chambers, and when the parts containing them are cut off and bolted on again for greater convenience in fitting the valves, and parts so cut off are the *valve boxes* or *valve casings*, and then the chambers are said to open out into the valve casings instead of opening into the cylinder. This, however, is but a matter of words. It is one continuous passage though in two parts bolted together.

In the introductory part of his specification, the patentee says, "the invention consists of the construction of the side chamber of the cylinder, and the valve casing as hereinafter described" &c., and further on he says, "By this arrangement the passages B, B, are made to communicate with a valve casing bolted outside the pumps which is a distinguishing feature of my invention."

This device of making the chamber and casing in separate pieces, which the patentee thus sets forth to be the thing he has invented, has

some practical advantages. It is more easy to hold a valve casing in a lathe to fit the valve-seats than it is to hold a whole pump for that purpose. On the other hand there is the extra work of bolting on the valve case to its place—and whether there be more advantage in one practice or the other is a debatable point. Mr. Burrows, a witness for the defendants on the testimony for the hearing (Record p. 44), thought it would be cheaper to cast the casing solid with the cylinder and fit it there. It is probable that the difference either way would not be great, and had the plaintiff succeeded in obtaining a patent for that feature, it could have been investigated. Mechanics could have estimated its value and the plaintiff could have obtained the full value of all he had produced. But, when the applicant came to the Patent Office, he found that he had been anticipated in his invention—indeed that valve casings were an old and well known device. In the testimony for the hearing (p. 42, fol 98), Mr Cowing says, "it is an old, well established device, and understood by all pump makers." Mr. Clapp says, "it is very old—I don't know how old—but it is old" (p. 49 fol 109). Mr. Holley, an expert for the plaintiff, says, "it is an old device to bolt valve-casings to steam cylinders and to water pumps" (p. 55 fol 121). Mr. Cowing says that the defendants had made pumps with valve casings for nearly 20 years (p. 39 fol 93). The application for a patent was rejected: 1st, on the 7th of March, 1870, and then finally after full hearing, on the 11th of January, 1871 (defendants' answer, p. 6 fol 12). (The proceedings in the Patent Office were put in evidence, but seem to have been lost). Then came in the skill of the patent attorney. What had been set forth as the patentee's invention was disclaimed; new claims were invented for (what it is difficult to say) and finally, on the 8th of August, 1871, a patent was improperly granted.

The specification thus formed is contradictory in several respects. Different parts do not accord with each other or with the claims. And I think it will be apparent to the Court, that taking away the valve casings left nothing of the least practical value in the patent.

I proceed to examine.

THE CLAIMS.

As finally made. The first one reads:

> "What I claim as my invention and desire to secure by Letters "Patent is—1st. The chamber, E, provided with a longitudinal par- "tition, *a*, forming distinct and separate passages, *b*, *b*."

The chamber, as already observed, is the part of the passages to and from the cylinder that is cast with the body of the pump; then to it are

attached lead pipes which continue the passages down into the well and up from the pumps to the place where the gas or other fluid is to be carried.

Referring to the disclaimer (folio 8), he says: "I am aware that it is common to cast a side-chamber to a double-acting pump, to allow the medium to follow the action of the plunger." In every double-acting pump there are necessarily two passages. The plunger or piston, at the same time, draws the medium in through one passage and forces it out through the other. A chamber, therefore, to a double-acting pump that allows the medium to follow the action of the plunger, must be a chamber with two "distinct and separate passages," and if these be distinct and separate passages, it must be "provided with a longitudinal partition" between them. So far then the claim and the disclaimer relate to the same thing, though expressed in different words, and they contradict each other. The disclaimer adds, "such, in its broad sense, I do not claim; I claim only the special construction of my chamber, whereby the same is adapted to use with the valve casings bolted upon the outside."

In his description (at folio 3), he says, "on one side of the cylinder is cast a chamber, E, extending from top to bottom. This chamber is divided longitudinally by a partition, *a*, which thus forms two longitudinal passages, *b*, *b*, which have no communication with each other or with the cylinder. Lateral ports, *c*, *c*, are made in the sides of these passages for the connection of the pipes which extend to the well and to the furnace. These passages, *b*, *b*, do not open at top and bottom into the interior of the cylinder, as in ordinary double-acting pumps, but open outwards by ports, *d*, *d*, and thus communicate with similar ports, *d'*, *d'*, of the valve-casing, F, the construction of which will presently be described. By this arrangement the passages, *b*, *b*, are made to communicate with a valve casing bolted outside of the pump which is a distinguishing feature of my invention."

All this was undoubtedly upon the supposition that the patentee was the first to make separate valve casings. He says, in substance, that the chamber or orifices that are cast on to the pump do not open into the cylinder, with valves inserted in them, as in ordinary double-acting pumps, but that he has cut off the part containing the valves and bolted it on again to the outside of the pump, and that the orifices of the chamber terminate or open out into these valve-casings instead of the cylinder, and that this is the distinguishing feature of his invention. But this is inconsistent with the claims allowed and the disclaimers he was compelled to meke, and the whole is contradictory.

The claim further says,

"which have side ports, *c*, *c*, for the attachment of the induction and "eduction pipes."

Every chamber must have holes (these have the dignified name of "ports") to which are attached the lead pipes. The pipes and chamber form one continuous passage to or from the cylinder. These orifices are placed wherever it is most convenient to attach the lead pipe, having reference to the place the pump is to occupy. There can be nothing new in this part of the claim.

Finally the claim adds:

"and ports, *d*, *d*, at top and bottom opening outwards into the valve-"casings, as herein described."

If we suppose a pipe 30 feet long to be divided into parts and these parts bolted together, or if we imagine these parts to exist without any division, then it may be said that one part opens into another; or, in the language of the patent, that each part has "ports opening outward" into another. Nevertheless there is but one continuous passage, and all that is said about ports opening outward or inward is mere verbiage. In like manner the complainant may say that the lead pipe has a port opening outward into the chamber, that the chamber has a port opening outward into the valve casing, and that the valve casing has a port opening outward into the cylinder. Yet there is but one continuous passage, with a valve in it that permits the flow onward but prevents its return. In like manner, when the fluid flows out from the pump it may be said that the cylinder has a port opening outward into the valve casing, and that the valve casing has a port opening out into the chamber, so that in fact the chamber has one port opening outward and another port opening inward. And the claim of a chamber with ports opening outward is for what is not true and further confuses the patent.

But if we concede, as all the witnesses testified and as the disclaimer admits, that valve cases had been made before the patentee's invention and that it was an old and well known device, then there must, from the necessity of the case, have been open spaces between the chamber and the valve case to allow the flow from one to the other, and it might be said that the chamber had one port opening outward into the valve case and another port opening inward from the valve case, just as it does in the plaintiff's pump, and in all other double-acting pumps that have separate valve casings.

Taking, then, this claim as a whole, it is for a chamber with a partition to make two passages, which is disclaimed, having orifices for the

attachment of lead pipe as found in all pumps, and opening out into the valve cases, or rather one opening out into the valve case and one opening inwardly from the valve case, which is a necessary feature of separate valve cases in all pumps. There is no new device that a mechanic can appreciate or whose value he can estimate. Our examination of it fully confirms the testimony of Mr. Hawley, the inventor, when he was on the witness stand. He frankly stated (p. 75, fol. 170-171.)

"It is utterly impossible for me to give the profits from the manufacture and sale of any particular part of this pump." And on cross-examination he said (fol. 172,) "I think it would be impossible for any one to ascertain the profits arising from the manufacture of any particular part of these pumps; I mean to say it would be impossible to ascertain the profits arising from the manufacture of any one or more of the parts less than the whole." As the claim professes to be to a part only of the plaintiff's pump, the testimony is equivalent to saying that there is nothing in this claim that has any value or to which any profit can be attributed.

I proceed next to the second claim, which reads:—

"2. The duplex valve casings, F," (fol. 10).

That is, a valve casing with two valves in it, instead of a separate casing for each valve. In the disclaimer (fol. 8,) he says:

"In the same manner I do not claim broadly locating the valves in a "hollow casing."

That is, the two valves in one casing, or a "duplex valve casing." He also admits that it is not new to put the valves into a separate casing instead of into a part of the chamber; or that cutting off the part of the chamber that contains the valves and bolting it on again is not a new device. And if there be two valves in a casing they must be in juxtaposition, and the passages which lead to them must be in juxtaposition or have a longitudinal partition between them. In other words, the chamber must be divided by a longitudinal partition, forming distinct and separate passages, one for the flow to the cylinder, the other from it.

The claim adds:

"With the ports, d', d', d^2, opening respectively to the passages in the "side chamber and to the cylinder." If there be a continuous passage from the lead pipe to the cylinder there must, of necessity, be an opening from the chamber into the valve casing and from the valve casing to the cylinder. The valve casing is but a part of the passage intermediate between the chamber and the cylinder, and in every possible construction it must have "ports opening respectively to the

passages in the side chamber and to the cylinder." So far then there is nothing new in this claim; but the peculiarity is set forth in the next clause, as follows:—

"And provided with the seats, *g*, *g*, so arranged as to admit the gas "or other fluid over one valve and under the other, as herein described."

All valves have seats to which they are fitted—it is a necessary part of their construction. But these, he says, have a peculiar arrangement. The claim as a whole is for a duplex valve-casing with its necessary orifices, which is admitted to be old, and having valve seats so arranged as to admit the gas or other fluid over one and under the other, which is new. The novelty is not questioned, but the claim is for an impossibility. The only means provided for raising the valves is the pressure of the fluid itself against the under side. Their own weight and any pressure on the upper side closes them. The fluid flows in against the under side and raises it, and their office is to prevent any return. How is it possible to raise a valve by the fluid flowing in over it? No such thing takes place in the plaintiff's pump. The fluid flows in under one valve, raises it, and passes to the cylinder, and when leaving, it flows in under the other valve and raises it to pass out; and the same thing takes place in every other pump, and must do so in every possible construction.

It need hardly be said that a device which it is impossible to construct —that has not and never can have any existence—possesses no value and can produce no profit; and the testimony of the inventor, before referred to, that it would be impossible for any one to ascertain the profit arising from the manufacture of any one or more parts of the plaintiff's pump, receives further corroboration from an examination of this claim.

I come next to the third and last claim. It reads:—

"3. The combination and arrangement with the cylinder, B, of the "outside side-chamber, E, provided with the seats, *f*, *f*, of the valve-"casings bolted thereon in the manner and for the purposes specified."

The combination of cylinders with outside chambers is admitted to be old, and if there be separate valve casings they must have seats on which to fasten them. Bolting them on is an ordinary mechanical expedient. The claim is but a repetition of other claims in different language, and what has been said in reference to them is equally applicable to this claim. Like the other claims it is not for any new device that is an improvement in the art—that can be set forth so that what is new can be distinguished from what is old—that a mechanic can appreciate, testify to its value, and point out its advantages. What was said by the inventor, as a witness, is fully confirmed by an examination of this claim, and it would be wholly

impossible for any one to ascertain the profits arising from the manufacture of the part of the plaintiff's pump covered by this claim, as it was of the parts covered by other claims.

The inquiry, what is there that is new in the plaintiff's pump, is one which has pressed itself upon us in every stage of this suit. The plaintiffs called an expert to this point in the testimony for the hearing (p. 54, fol. 119), Mr. Holley, superintendent of a manufactory of "all kinds of air pumps and gas pumps" at Lockport—he said, "I consider the essential part of this model (Exhibit B) to be in the valve-boxes being cast in a separate piece" &c. He went on to state its advantages and concludes, "I consider the detached valve-box the essential part of this invention." Mr. Holley was a very competent witness. He is the inventor of the Holley system of supplying water to cities. He is the inventor of a well-known rotary pump. As superintendent of a large manufacturing establishment, he had given special attention to the subject of pumps and pumping machinery for 35 years. Whatever there was that was new in the plaintiff's pump he could, at once, detect and appreciate. In the view of this witness, the essential part of the plaintiff's pump was not any part covered by the patent, but a part for which a patent had been refused. As he was called to testify to the value of the patent, it is evident that he did not regard anything in the claims of the patent as of the least value or importance.

The patentee himself was a witness to the same point, (p. 51, fol. 113), and he then regarded the separate valve-cases as the essential feature in the complainants pump, instead of anything claimed in the patent.

On the second reference, the views of this witness had become considerably enlarged. "We," he said, (meaning, I suppose, himself and the plaintiffs), (p. 75, fol. 170), "claim that the patent covers the valve-boxes and passages in combination with the cylinder and other parts common to all pumps." And on cross-examination, (fol. 171), he said, "with the patented parts removed from the pump it would not be a pump." This is really a claim to the whole pump, not only to the valve-cases, but to the passages, without which, there could not be a pump. And this view accords with other parts of the plaintiff's testimony. Finding that there was no one or more parts of his pump to which any value could be assigned, or that any one could ascertain the profits of making, and foreseeing that he could recover nothing unless it were for the whole, he boldly claims to be the first inventor of pumps, and totally ignores what is set forth in the patent.

Mr. Osgood, the plaintiff's patent attorney, who obtained the patent

and drew the specifications, was examined by the plaintiff as to the peculiarities of his pump, and he did not inform us that there was anything embraced in the claims of the patent that possessed any novelty or value, or that could be the source of any profits. Indeed, we have never at any time, in the testimony for the hearing, or in the testimony on two references, been informed that the claims of the patent embraced any device that could be constructed or had any practical value. To this essential point the last reference was especially directed, with instructions from the Court so plain and clear that no one could misunderstand them, and the result is that we are now assured by testimony as well as by the patent, that there is no part of the plaintiff's pump covered by either of the three claims that possesses any advantage over other pumps that can be estimated or stated.

It is now manifest that the plaintiffs' pump possesses no patentable feature, and no patent should ever have been granted for it. Patents are granted for real practical improvements; they are intended to reward those who make practical advances in the arts. Speculative notions, theoretical structures, changes of form merely, new arrangements of machinery without practical benefits—even philosophical discoveries and abstract truths are not patentable. It must be something that is reduced to practice and capable of being defined and estimated, to sustain a patent. The patent act, (Act of 1870, § 26), requires that in case of a machine, the patentee shall specifically point out and claim the part that is new in his device, and it must be so described that what is new may be distinguished from that which is old. It necessarily follows, that if the supposed improvement be not such a device that it can be distinctly pointed out and distinguished from what is old, and possess practical advantages that can be estimated; or, if possessing these requisites, the patentee fails to so point it out, the patent will be void. The case of Phillips vs. Page, 24 Howard, 164, presents an example of a patent for a meritorious invention, being declared void for the want of a compliance with the statute.

THE PROPER MEASURE OF DAMAGES

When there is a real prtentable device was fully stated in the opinion of Mr. Justice hunt. He says:

"I understand the rule to be settled that when the patent is for an im-
"provement upon a machine; the damages are confined to the profits
"made by the use of the improvement only, and not by the manufacture
"of the whole instrument. What profit or advantage did the defendant
"obtain by the use of the plaintiff's improvement? What advantage did

"he have that he would not have had if he had built his machine without "the improvement?

"In Phillips vs. Hock, 17 Wall., 460, although the case did not per- "haps require an adjudication of this point, the rule is thus laid down by "Swayne, J.: 'Where the infringement is confined to a part of the thing "sold, the recovery must be limited accordingly. It cannot be as it the "entire thing were covered by the patent; or where that is the case, as if "the infringement were as large as the monopoly. * * The plaintiff "must show his damages by evidence. They must not be left to con- jecture by the jury.'

"In Morey vs. Whitney, 14 Wall., 620, 649, the precise point before "us was in question. The defendant was charged by the Master with "$91,000—as the profits arising from the use of the plaintiff's patent in "manufacturing car wheels, which was the profit obtained from the manu- "facture of the entire wheel. In delivering the opinion of the Court, "Strong, J., says: 'It is clear that Whitney is not entitled to receive more "more than the profits actually made in consequence of the use of his pro- "cess in the manufacture of the wheels. It is the additional advantage "the defendant derived from the process—advantage beyond what he had "without it for which he must account * * but the Master charged "the profit obtained for the entire wheel, instead of that resulting from "Whitney's invention in a part of the manufacture. It is as true of a "process invented as of an improvement in a manufacture, that an infrin- "ger is not liable to the extent of his entire profits in the manufacture. " * * The question is, what advantage did the defendant derive from "using the complainant's invention over what he had in using other pro- "cesses then open to the public, and adequate to enable him to obtain an "equally beneficial result? The fruits of that advantage are his profits. "They are all the benefits he derived from the existence of the Whitney "invention.

"It is not necessary to examine this question at large. The Supreme "Court has decided it explicitly, and if there are cases found to the con- "trary, they must be considered as overruled."

There have been several subsequent cases in the Supreme Court in which this rule has been applied and affirmed, and there are no exceptions to it. It is a rule that gives to an inventor the full benefit of all that he has produced, and declares that he shall not appropriate to himself what belongs to the public or perhaps to other inventors.

The Master, however, on the second reference, deemed it proper to entirely disregard this rule. No enquiry was made or evidence offered

as to the value of anything embraced in the claims of the patent. He gave the plaintiffs the profits on the whole pump just as the former Master had done and for which his report was set aside. He even went beyond that. He gave them the profits of pump making without deductions for many of their more important expenses. The rule itself the Master styles "stern rule of law," and speaks of subjecting the case to it, "however much may be the injustice to this plaintiff." He evidently labored for some excuse to evade what he deemed a hard unjust law, and the doing of a great wrong to the plaintiffs.

It remains for me to notice,

SOME OF THE REASONS AND STATEMENTS OF THE MASTER.

Under the head of facts, after stating that the defendants had sold 298 pumps at $80 apiece, he says: "The cost of manufacturing them at Seneca Falls was $33.54 apiece." This is the sum which Mr. Gould, on the former reference, (p. 69, fol. 149,) stated to be the cost of making 14 inch pumps at the plaintiff's works. He said, "in making this computation I have estimated the items of materials and labor. These are all the items which enter into the cost of a pump—material and labor." On the last reference he and Mr. Hawley gave a detailed statement of this amount, which is made Exhibit B. By comparing this with Exhibit A, which is Mr. Cowing's statement of the expenses at the defendant's works, it will be seen how many items of expense are omitted in Messrs. Gould and Hawley's statement. In the testimony (p. 76, fol. 174,) Mr. Cowing is made to say "we manufacture these pumps and continue to manufacture them at $31.37 a pump." This is evidently a mistake of the Master. Mr. Cowing's detailed statement, Exhibit A, shows an expense of $79.69.

The Master further states, (p. 17,) "I find as further facts from the evidence, that the plaintiff's pump, with its patented improvement, which it had introduced into the market, virtually controlled the market, and had superseded all the other pumps then in use for pumping gas, and others were literally driven out of the market as they could not be sold at the places where the plaintiff's pumps had been introduced."

The merits of the plaintiff's pump and its success in the market was something with which we had nothing to do. The only proper inquiry was as to the parts of it covered by the claims of the patent. We have never doubted that the plaintiff's pump was a good one, but the Master's extravagant encomiums of it will be found, from the testimony, to be quite imaginary.

The use of these pumps was to suck up the gases that rose outside of

the oil tubes and force them under the boiler to supply in part the fuel that propelled the engines. The idea for a time was a popular one. But with experience the practice was gradually discontinued, and it substantially ended in 1872. Mr. Cowing says (p. 76, fol. 174): "The demand in the oil regions ceased a little before January, 1873. We manufactured and sold these pumps as long as any one would buy them." The ordinary water pump will not answer for gas. It requires closer joints —better fittings. There is no patentable difference between the two pumps—it is a difference in workmanship. As Mr. Pollard expresses it (p. 76, fol. 172): "The valves require closer fitting for gases than would answer for water." Excepting the Messrs. Gould, none of the prominent pump manufacturers seem to have gone into the business; on account, as I suppose, of the superior workmanship required and the limited nature of the demand. Mr. Pollard, who was the only witness upon the subject, says (p. 75, fol. 170): "Before we commenced manufacturing this pump, two or three different rotary pumps were in use exclusively for pumping up gases from oil wells. Then a piston pump was introduced built in Erie, Penn., which, for a short time, had a large sale." This was the state of the market when the plaintiff's pump went into it. Rotary pumps as well as rotary steam engines have always proved inferior to pistons and been superseded by them. The latter are more simple, more durable, more easily repaired and more effective. The Erie piston seems to have superseded them at the oil wells, for the witness says it had a large sale. The plaintiff's competition then, in the sale of his pumps, was with the Erie manufacturer. He employed an agent, living on the spot, to promote his sales, and as the witness expresses it, "our pumps virtually controlled the market and drove others from the market." That is to say, the plaintiff and his agents got away the customers of the Erie maker. But they did not do so entirely, for the witness adds, "there were a few others, I presume, put in" to the wells. The witness was the plaintiff's mechanical superintendent with a great number of men under his charge. He could not have been much absent from the manufactory or know much about the oil regions, and so he says he "presumes" there were some other pumps put in besides the plaintiff's.

We have no information in regard to these Erie pumps or the manufactory where they were made, or as to their character or quality. Many reasons may be conceived why the plaintiff's pumps should outsell them. It may be that the plaintiff's was better made or better designed, or sold at a less price or on better terms, and it is very probable

that with their large establishment and every facility for making cheaply and to the best advantage, they could sell lower than the Erie man could afford. It may be that the plaintiff, by employing agents to go to the wells and personally solicit orders and attend to putting in the pumps, got away, in this manner, the Erie customers, or that the Erie manufacturer had other and more profitable business and did not care to compete with the plaintiff in their manner of selling the pumps.

That the plaintiff's success, such as it was, was not due to anything contained in the claims of the patent we have the most conclusive evidence. For, if there had been any such invention, so important that it controled the market—that it superseded all other pumps in use; that all others were literally driven out of the market, and could not be sold where the invention had been introduced—all this would have appeared from the discriptions in the patent; witnesses could have readily explained it and pointed out its advantages and estimated its value, and we should not have had any testimony that it was utterly impossible for any one to ascertain the profits arising from its manufacture.

The report proceeds in its statement of facts: "The defendant went "into the very market where the plaintiff's pump had been introduced "and where it had sold, and where plaintiff was then supplying most "of its pumps, and the defendants in fact went and employed Winsor, "the former agent of the plaintiff, to sell the pumps for them, and he, "from being the plaintiff's agent in the locality, made very ready "sales of the same pumps for the defendants, and had not the defend-"ants interfered in urging the pumps which they manufactured upon "this local market, the plaintiff would certainly have had the whole "market to itself."

The Master was again under great misapprehension in regard to these aggravating circumstances. The application for plaintiff's patent was twice rejected (defendants' answer, p. 6, fol. 12). The defendants believing that the matter was disposed of and that no patent would be granted for valve cases, in the Spring of 1871, (Test. on hearing, p. 34, fol. 84), were employed by Geo. W. Winsor, or Winsor Bros., to make for them a quantity of pumps—the kind and dimensions being specified by Winsor. When the patent came out the defendants were engaged upon this contract. They did not see that the claims allowed covered any part of the pumps they were making. The gas was not admitted over one valve and under the other. There was nothing that was not old. They completed their contract, and afterwards continued to receive orders and manufacture for Winsor as long as the business lasted. At its close

defendants sent to Winsor 34 pumps to be sold on commission, 30 of which were returned or unsold, and 7 to a person in Canada, 3 of which were unsold, and that ended the business, (Test. on first reference, p. 65, fol. 142.) The witness says, (*ib.* 140) "all we shipped we charged to him", —Winsor. "We had specific orders for these shipments" (*ib.* fol. 140). "Winsor Bros. were not our agents. They bought from us" (p. 66, fol. 143). "The pumps were delivered to Winsor Bros., at the depot at Seneca Falls" (*ib.* fol. 144). "After an order is received it takes towards a month to get the pumps ordered manufactured ready for delivery" (*ib.* fol. 145). "The pumps sent to Winsor, or Winsor Bros., have been charged to him or them on the day of their delivery at Seneca Falls, or within a day or two of that time" (*ib.* fol. 144), "The terms of sale to Winsor Bros., were cash; cash sometimes meant 30 days and sometimes not; sometimes we got a note for them" (p. 66, fol. 143). "Twenty-five pumps delivered to Winsor were afterwards returned" * * because "they had not been made according to Winsor's directions" (folio 144).

So that with the small exception I have mentioned, the defendants never sold a pump out of Seneca Falls, never employed an agent to sell them, and never manufactured any except to fill orders received for them, And all that has been said about the defendants going into the very market where the plaintiff's pumps had been introduced, and the defendants in fact going and employing the plaintiff's agent to sell pumps for them, and thereby making ready sales; and about the defendants interfering in urging the pumps which they manufactured upon the local market, &c., is a misapprehension. But if the defendants had done all the bad things that the Master fancied, and had not violated any of the claims in the patent, then we submit that they had the same right to compete with the plaintiff's pumps that the plaintiff had to go to the oil regions and interfere with the business that the Erie manufacturer had established there.

The report proceeds to say:—

"It has been decided by the learned Judge before whom this very case "was heard on exceptions to the Master's report, that the plaintiff can only "recover the profits made on the damages sustained by the plaintiff in "the defendants' use of the plaintiff's patented part of the pump. As "there were many parts of the pump not covered by the plaintiff's patent, "and in known use, they could not have the profits resulting from the "manufacture and sale of the whole pump, and if he could not make the "proof so as to leave the patented part from the rest of the pump, and

"show what profits the defendants had made by the use of, or what "damage the plaintiff had sustained by the use of his patented part of the "pump, then the plaintiff could only recover nominal damages. We must "therefore subject the case to this stern rule of law, however much may "be the injustice to these plaintiffs.

"I do not think however there is any difficulty in this case as it now "stands. It is not the case presented to the learned Judge and who de- "cided: 'The proof now shows the plaintiff's pumps with his patented "improvement had virtually superseded the other pumps, and had con "trol of the market, so far as that none others could be sold for pumping "gas.'"

I have presented to the Court all the proof there is touching the plaintiff's pump superseding all others. It is quite simple. First, two or three rotary pumps were used; then came in a piston pump made at Erie. The plaintiff, by employing agents to solicit purchasers and put in the pumps, or by some other means not specified, had succeeded in getting away a large part of the business of the Erie manufacturer, and this is all we have upon the subject. It is altogether gratuitous to assume that the plaintiff's pumps superseded all others, so that none others could be sold for pumping gas. Indeed had some other manufacturer of well made pumps gone into that market and used the same means of selling that the plaintiff did, there is nothing to show that he would not have sold as many pumps as the plaintiff sold, and perhaps superseded them in the market.

The Master having assumed a state of facts that did not exist, proceeds to draw an extraordinary conclusion from them. He says:—

"It follows as a consequence that the whole profits made by the de- "fendants were owing to the use of the plaintiff's patented improvement, "or addition to this pump, as the market demands no other."

It is strange that it never occurred to the Master to inquire what improvement or addition it was that gave this great value to the plaintiff's pump. Was it something that is embraced in the claims of the patent; then this was a matter to be proved. It could not be assumed. It was the very point of inquiry referred to the Master, and should have been shown by the patent and by witnesses explaining it and showing its value.

If it was something not embraced in the claims, then it was a thing with which we had nothing to do, and everything in regard to it was irrelevant. Did the Master suppose that there could be an addition to the plaintiff's pump so valuable that it made it supersede all others, and so well-known and appreciated by the public that they would have no other,

and yet that it could not be seen and explained and had no value that any one could estimate? Such is not the case with real improvements. If the Master was right in his inferences, and there was really so great an invention—greater indeed than any relating to pumps that has been made within a century—then the patent is void for not setting it forth. If he is right then he has greatly mistaken his duty, for if the whole world could see and appreciate such an improvement, the Master certainly could have investigated it and reported upon its value.

The simple inquiry referred to the Master was not the plaintiff's pump, nor the plaintiff's success in his business, but the value of the patented part of the pump. And had it been proved that the plaintiff's pump was the best in the world, and had superseded all others, it would have amounted to nothing unless the proof had gone further and shown that its superiority was due to those parts specifically pointed out and claimed in the patent. And this is a point that it was incumbent on the plaintiff to prove, if it could be proved. Mr. Justice Hunt in his opinion referred to, says:

"The burden of proof rested upon the complainants. The damages to "the plaintiff or the profits to the defendants (they are the same "things), must be proved like the other points in the case. For all the "profits or advantages with which he has been charged (except that pre- "cise advantage derived from using the plaintiff's improvement), the "defendants may still be liable to other inventors or he may have "already paid for them to those inventors. Upon no principle can "the plaintiff assume that they belong to itself, and call upon the de- "defendants to disprove this assumption. * * *

"The Master should have decided that, as the plaintiff had failed to "show the profits or damages arising from the use of its improvement, "nominal damages only could be recovered."

The case stood on the second hearing as it did on the first. The plaintiff had given proofs as to his pumps and his business, but he had not shown that any advantages were derived from the devices claimed in his patent. Indeed, he has not shown what those devices are nor anything about them.

The defendants were put to much expense on account of the second reference. It was granted to the plaintiffs as a matter of special favor, on the ground that they might have omitted through inadvertance to to prove what they should have proved on the first reference. But the case still stands, as it stood before, without any testimony upon the only point in question. One important fact only has been added—a fact

that appears as well by an examination of the patent that the plaintiff's omissions were a matter of necessity, and that there is no one or more parts of the plaintiff's pumps on which any profits can be estimated.

The Bill in this Case should have been dismissed on the ground that there is no patentable device set forth in the complainant's patent, so that it can be distinguished from what is old, and it should have been decreed to pay the costs of the second reference.

ELISHA FOOTE.

of Counsel for Defendants.